

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

(Mark One)

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2018

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

for the transition period from _____ to _____

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report

Commission file number 001-38475

ASLAN Pharmaceuticals Ltd

(Exact name of Registrant as specified in its charter)

Not Applicable

(Translation of Registrant's name into English)

Cayman Islands

(Jurisdiction of incorporation)

83 Clemenceau Avenue #12-03 UE Square

Singapore 239920

(address of principal executive offices)

Carl Firth

Chief Executive Officer and Chairman

ASLAN Pharmaceuticals Limited

83 Clemenceau Avenue #12-03 UE Square

Singapore 239920

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered, pursuant to Section 12(b) of the Act:

Title of each class

Name of each exchange on which registered

American Depositary Shares (ADSs), each representing five ordinary shares, par value NT\$10 per ordinary share

The Nasdaq Global Market

Ordinary shares, par value NT\$10 per share *

The Nasdaq Global Market *

* Not for trading, but only in connection with the registration of the American Depositary Shares.

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

Indicate the number of outstanding shares of each of the issuer's classes of capital stock or common stock as of the close of business covered by the annual report.

Ordinary shares, par value NT\$10 per share: 160,248,940 as of December 31, 2018

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued by the International Accounting Standards Board

Other

If "Other" has been checked in response to the previous question indicate by check mark which financial statement item the registrant has elected to follow. Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

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GENERAL INFORMATION

Unless otherwise indicated or the context otherwise requires, all references in this Annual Report to the terms “ASLAN,” “ASLAN Pharmaceuticals,” “the company,” “we,” “us” and “our” refer to ASLAN Pharmaceuticals Limited and its subsidiaries.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Our consolidated financial statements have been prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standard Board, or IASB, which may differ in material respects from generally accepted accounting principles in other jurisdictions, including the United States.

Our functional currency is the U.S. dollar. Unless otherwise specified, all monetary amounts presented are in U.S. dollars. All references in this Annual Report to “\$” mean U.S. dollars, all references in this Annual Report to “NT\$” mean New Taiwan dollars, the legal currency of the Republic of China, or ROC, and all references in this Annual Report to “SG\$” mean Singapore dollars, the legal currency of Singapore. No representation is made that the New Taiwan dollar amounts referred to herein could have been or could be converted into U.S. dollars at any particular rate or at all. Any discrepancies in any table between totals and sums of the amounts listed are due to rounding.

We have made rounding adjustments to some of the figures included in this Annual Report . Accordingly, numerical figures shown as totals in some tables may not be an arithmetic aggregation of the figures that preceded them.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (Exchange Act), that involve substantial risks and uncertainties. In some cases, you can identify forward-looking statements by the words “may,” “might,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “objective,” “anticipate,” “believe,” “estimate,” “predict,” “potential,” “continue” and “ongoing,” or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. The forward-looking statements and opinions contained in this Annual Report on Form 20-F are based upon information available to us as of the date of this Annual Report and, while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. Forward-looking statements include statements about:

- the outcome, cost and timing of our product development activities and clinical trials;
- our plans and expected timing with respect to regulatory filings and approvals;
- our ability to fund our operations;
- our plans to develop and commercialize our product candidates and expand our development pipeline;
- our ability to enter into a transaction with respect to commercialization of our products and product candidates;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- our sales and marketing strategies and plans;
- potential market acceptance of our product candidates;
- potential regulatory developments in the United States and foreign countries;
- the performance of our third party suppliers and manufacturers;
- our ability to compete with other therapies that are or become available;
- our expectations regarding the period during which we qualify as an emerging growth company (EGC) under the Jumpstart Our Business Startups Act (JOBS Act);
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing; and
- our expectations regarding the terms of our patents and ability to obtain and maintain intellectual property protection for our product candidates.

You should refer to the section titled “Item 3.D. Risk Factors” for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this Annual Report will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. We claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995 for all forward-looking statements.

You should read this Annual Report and the documents that we reference in this Annual Report, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

Unless otherwise indicated, information contained in this Annual Report on Form 20-F concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity and market size estimates, is based on information from independent industry analysts, third-party sources and management estimates. Management estimates are derived from publicly available information released by independent industry analysts and third-party sources, as well as data from our internal research, and are based on assumptions made by us based on such data and our knowledge of such industry and market, which we believe to be reasonable. In addition, while we believe the market opportunity information included in this Annual Report on Form 20-F is generally reliable and is based on reasonable assumptions, such data involve risks and uncertainties and are subject to change based on various factors, including those discussed under the section of this Annual Report on Form 20-F titled “Item 3.D—Risk Factors.”

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

A. Selected financial data.

The following selected consolidated statement of comprehensive loss data for the years ended December 31, 2016, 2017 and 2018 and the selected consolidated balance sheet data as of December 31, 2017 and 2018 have been derived from our audited consolidated financial statements included elsewhere in this Annual Report on Form 20-F. Our historical results for any period are not necessarily indicative of results to be expected for any future period. The selected consolidated financial data should be read in conjunction with, and are qualified in their entirety by reference to, our audited consolidated financial statements and related notes and “Item 5. Operating and Financial Review and Prospects” below.

	Year ended December 31,		
	2016	2017	2018
	(in thousands, except share and per share data)		
Selected Consolidated Statement of Comprehensive Loss Data:			
Net revenues	11,547	—	—
Cost of revenues	(125)	—	—
Operating expenses			
General and administrative expenses	(6,956)	(8,759)	(10,514)
Research and development expenses	(13,165)	(30,381)	(31,834)
Loss from operations	(8,699)	(39,140)	(42,348)
Non-operating income and expenses			
Interest income	47	363	268
Other income	—	—	187
Other gains and losses	127	(698)	213
Finance costs	(524)	(417)	(492)
Total non-operating income and expenses	(350)	(752)	177
Loss before income tax	(9,049)	(39,892)	(42,171)
Income tax expense	—	—	(14)
Net loss	(9,049)	(39,892)	(42,186)
Weighted-Average shares used in calculating net loss per ordinary shares, basic	105,027,040	124,424,960	149,739,242
Net loss per share, basic	(0.09)	(0.32)	(0.28)

	As of December 31,	
	2017	2018
	(in thousands)	
Selected Consolidated Balance Sheet Data:		
Cash and cash equivalents	\$ 50,573	\$ 28,909
Total assets	51,334	52,881
Total current liabilities	5,979	7,998
Total non-current liabilities	9,841	14,264
Capital Stock - Ordinary Shares	41,514	51,627
Total equity	35,513	30,618
Number of shares issued	130,128,940	160,248,940

B. Capitalization and indebtedness.

Not applicable

C. Reasons for the offer and use of proceeds.

Not applicable

D. Risk factors.

An investment in our American Depositary Shares (ADSs) involves a high degree of risk. You should carefully consider the following information about these risks, together with the other information appearing elsewhere in this Annual Report, before deciding to invest in our ADSs. The occurrence of any of the following risks could have a material adverse effect on our business, financial condition, results of operations and future growth prospects. In these circumstances, the market price of our ADSs could decline, and you could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations and price of our ADSs.

Risks Related to Our Financial Condition and Need for Additional Capital

We have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future.

We are a clinical-stage oncology and inflammatory disease focused biopharmaceutical company based in Singapore developing novel therapeutics for global markets. We target diseases that are both highly prevalent in Asia and orphan indications in the United States and Europe. Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will not demonstrate adequate effectiveness in the targeted indication or an acceptable safety profile, gain regulatory approval or become commercially viable. All of our product candidates will require substantial additional development time and resources before we would be able to apply for or receive regulatory approvals and begin generating revenue from product sales. We are not profitable and have incurred significant net losses in each year since our inception, including net losses of \$9.0 million, \$39.9 million and \$42.2 million for fiscal years 2016, 2017 and 2018, respectively. As of December 31, 2018, we had an accumulated deficit of \$132.5 million.

We have devoted substantially all our financial resources to developing our product candidates and targeted discovery work, including preclinical development activities and clinical trials. We expect to continue to incur substantial and increased expenses, losses and negative cash flows as we expand our development activities and advance our clinical programs, particularly with respect to our planned clinical development for *varlitinib*, ASLAN003 and ASLAN004, as well as the ASLAN005 discovery program. If our product candidates are not successfully developed or commercialized, including because of a lack of capital, or if we do not generate enough revenue following marketing approval, we will not achieve profitability and our business may fail. Even if we successfully obtain regulatory approval to market our product candidates in the United States and Europe, our revenue will also be heavily dependent upon the size of the markets outside of the United States and Europe, in particular China and Japan, as well as our ability to obtain market approval and achieve commercial success in those markets.

We currently do not generate any revenue from product sales, have generated only limited revenue since inception, and may never be profitable.

We do not anticipate generating revenue from sales of our proprietary product candidates for the foreseeable future. Our ability to generate future revenue from product sales depends on our success in completing clinical development of, obtaining regulatory approval for, and launching and successfully commercializing any product candidates.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to predict the timing or amount of increased expenses, when, or if, we will begin to generate revenue from product sales, or when, or if, we will be able to achieve or maintain profitability. In addition, our expenses could increase beyond planned levels if we are required by the U.S. FDA to perform studies in addition to those that we currently anticipate or if such studies are larger, take longer or are otherwise more expensive to conduct than we expect.

Even if one or more of our product candidates is approved for commercial sale, to the extent we do not engage a third-party collaborator, we anticipate incurring significant costs associated with commercializing any approved product candidate. Even if we are able to generate revenue from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations.

We will need to obtain substantial additional financing for our operations, and if we fail to obtain additional financing, we may be forced to delay, reduce or eliminate our product development programs or commercialization efforts.

Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is expensive and we have consumed substantial amounts of capital since inception. To date, we have financed our operations through government subsidies and grants, collaboration payments and the sale of equity securities and convertible debt. We will need substantial additional financing to continue our operations and do not expect revenues from product sales or potential licensing transactions to be sufficient to offset our development expenses as we advance our clinical programs, including *varlitinib*.

As of December 31, 2018, we had cash and cash equivalents of approximately \$28.9 million and working capital of \$21.0 million. Based upon our current operating plan, we believe that our existing cash and cash equivalents will enable us to fund our operating expenses and capital requirements for at least the next 12 months. Regardless of our expectations as to how long our existing cash and cash equivalents will fund our operations, changing circumstances beyond our control may cause us to consume capital more rapidly than we currently anticipate. For example, our clinical trials may encounter technical, enrollment or other difficulties that could increase our development costs more than we expect. We may also incur expenses as we create additional infrastructure to support our planned commercialization efforts and our operations as a U.S. public company. In any event, we will require additional capital prior to completing pivotal studies of (except with respect to *varlitinib* in biliary tract cancer), filing for regulatory approval for, or commercializing, *varlitinib*, ASLAN003, ASLAN004 or any of our other preclinical product candidates.

We cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. If we are unable to raise additional capital when required or on acceptable terms, we may be required to:

- significantly delay, scale back or discontinue the development or commercialization of our product candidates;
- seek corporate partners for our product candidates when we would otherwise develop our product candidates on our own, or at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available;
- relinquish or license on unfavorable terms, our rights to technologies or product candidates that we otherwise would seek to develop or commercialize ourselves; or
- significantly curtail or cease operations.

If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we will be prevented from pursuing development and commercialization efforts, which will have an adverse effect on our business, operating results and prospects.

Risks Related to Clinical Development and Regulatory Approval

We are heavily dependent on the success of varlitinib, as well as ASLAN003 and ASLAN004. We cannot give any assurance that any of varlitinib, ASLAN003 or ASLAN004 will successfully complete clinical development or receive regulatory approval, which is necessary before they can be commercialized.

Our business and future success is substantially dependent on our ability to successfully develop, obtain regulatory approval for, and successfully commercialize our lead program, *varlitinib*, as well as ASLAN003 and ASLAN004. Any delay or setback in the development of any of our product candidates, could adversely affect our business and cause the price of our ADSs or ordinary shares to decline. Should our planned clinical development of our more advanced product candidates fail to be completed in a timely manner or at all, we will need to rely on our other product candidates, which will require additional time and resources to obtain regulatory approval and proceed with commercialization. We cannot assure you that our planned clinical development for *varlitinib* or our other product candidates will be completed in a timely manner, or at all, or that we will be able to obtain approval for *varlitinib* or any of our product candidates from the U.S. FDA, the Chinese National Medical Products Administration, or NMPA (formerly China Food and Drug Administration, or CFDA), or any comparable foreign regulatory authority.

Clinical development is a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results. Failure can occur at any stage of clinical development. We have never completed a pivotal clinical trial for our product candidates or submitted a New Drug Application, or NDA, or a Biologics License Application, or BLA, to the U.S. FDA or similar drug approval filings to comparable foreign authorities.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of subsequent clinical trials. We have a limited operating history and to date have not demonstrated our ability to complete large scale pivotal clinical trials.

Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. In addition to the safety and efficacy traits of any product candidate, clinical trial failures may result from a multitude of factors including flaws in trial design, dose selection, placebo effect and patient enrollment criteria. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Based upon negative or inconclusive results, we or any potential future collaborator may decide, or regulators may require us, to conduct additional clinical trials or preclinical studies. In addition, data obtained from trials and studies are susceptible to varying interpretations, and regulators may not interpret our data as favorably as we do, which may delay, limit or prevent regulatory approval. Our future clinical trials may not be successful.

If any product candidate is found to be unsafe or lack efficacy, we will not be able to obtain regulatory approval for it and our business may be materially harmed. For example, if the results of our ongoing pivotal studies for *varlitinib* in biliary tract cancer, our ongoing Phase 2 clinical trial of ASLAN003 in AML, our ongoing Phase 1 clinical trial of ASLAN004 in atopic dermatitis, or any other clinical trials for these product candidates demonstrate unexpected safety findings or do not achieve the primary efficacy endpoints, the prospects for approval of these product candidates, as well the price of our ADSs and ordinary shares and our ability to create shareholder value would be materially and adversely affected.

In some instances, there can be significant variability in safety and/or efficacy results between different trials of the same product candidate due to numerous factors, including changes in trial protocols, differences in composition of the patient populations, adherence to the dosing regimen and other trial protocols and the dropout rate among clinical trial participants. For example, we could be required to use a primary endpoint in our pivotal studies that is different from endpoints in our Phase 2 clinical trials, which could result in negative or less compelling efficacy results in pivotal trials despite promising results in Phase 2 clinical trials. We do not know whether any future clinical trials we may conduct will demonstrate consistent or adequate efficacy and safety to obtain regulatory approval to market our product candidates. If we are unable to bring any of our current or future product candidates to market, our ability to create long-term shareholder value will be limited.

Delays in clinical trials are common and have many causes, and any delay could result in increased costs to us and jeopardize or delay our ability to obtain regulatory approval and commence product sales.

We may experience delays in clinical trials of our product candidates. Our planned clinical trials may not begin on time, have an effective design, enroll a sufficient number of patients, or be completed on schedule, if at all. Our clinical trials can be delayed for a variety of reasons, including:

- inability to raise funding necessary to initiate or continue a trial;
- delays in obtaining regulatory approval to commence a trial;
- delays in reaching agreement with the U.S. FDA, NMPA or other regulatory authorities on final trial design;
- imposition of a clinical hold for safety reasons or following an inspection of our clinical trial operations or trial or manufacturing sites by the U.S. FDA, NMPA or other regulatory authorities;
- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites;
- delays in obtaining required institutional review board, or IRB, approval at each site;
- delays in recruiting suitable patients to participate in a trial;
- delays in having patients complete participation in a trial or return for post-treatment follow-up;
- clinical sites dropping out of a trial to the detriment of enrollment;
- time required to add new clinical sites; or
- delays by our contract manufacturers to produce and deliver sufficient supply of clinical trial materials.

We could also experience delays if physicians encounter unresolved ethical issues associated with enrolling patients in clinical trials of our product candidates in lieu of prescribing existing treatments that have established safety and efficacy profiles. Further, a clinical trial may be suspended or terminated by us, the IRBs for the institutions in which such trials are being conducted, any data monitoring committee for such trial, or by the U.S. FDA, NMPA or other regulatory authorities due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of clinical trial or manufacturing sites by the U.S. FDA, NMPA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. Furthermore, we rely on CROs and clinical trial sites to ensure the proper and timely conduct of our clinical trials and while we have agreements governing their committed activities, we have limited influence over their actual performance. If we experience termination of, or delays in the completion of, any clinical trial of our product candidates, the commercial prospects for our product candidates will be harmed, and our ability to generate product revenues will be delayed. In addition, any delays in completing our clinical trials will increase our costs and slow down our product development and approval process. Any of these occurrences may harm our business, prospects, financial condition and results of operations significantly. Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval for our product candidates.

Because we have multiple product candidates in our clinical pipeline and are considering a variety of target indications, we may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we must focus our research and development efforts on those product candidates and specific indications that we believe are the most promising. As a result, we may forego or delay pursuit of opportunities with other product candidates or other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities.

We may in the future spend our resources on other research programs and product candidates for specific indications that ultimately do not yield any commercially viable products. For example, one component of our business strategy is to build a broad immuno-oncology portfolio based on antibodies which inhibit specific immune checkpoints in ways that we believe will enable us to simultaneously target multiple pathways. However, these antibodies have not been proven and we cannot assure you that they will be viable candidates for preclinical development, that we will be able to target multiple pathways simultaneously or that our estimates for the resultant pipeline will prove accurate. In addition, the costs, time and resources required to successfully move these antibodies into development may be greater than our estimates. Furthermore, if we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights.

Our product candidates may cause adverse events or have other properties that could delay or prevent their regulatory approval or limit the scope of any approved label or market acceptance.

Adverse events, or AEs, caused by our product candidates or other potentially harmful characteristics of our product candidates could cause us, other reviewing entities, clinical trial sites or regulatory authorities to interrupt, delay or halt clinical trials and could result in the denial of regulatory approval. For example, across all *varlitinib* clinical trials, the most commonly occurring drug-related AEs as of December 31, 2018 were nausea (36% of patients with any grade, 1% with grade 3 or 4), diarrhea (32% of patients with any grade, 3% with grade 3 or 4) and fatigue (32% of patients with any grade, 4% with grade 3 or 4). Grade refers to the severity of the AE, with grade 3 indicating a severe or medically significant but not immediately life-threatening AE, grade 4 indicating an AE with potentially life-threatening consequences, and grade 5 meaning patient death.

Patients admitted to our *varlitinib* clinical trials are experiencing later stages of cancer and may be in a diminished physical state prior to entering our clinical trials, which put them at increased risk of death. These patients may die while receiving our drug candidates. In such circumstances, it may not be possible to exclude with certainty a causal relationship to *varlitinib*. For example, across our *varlitinib* clinical trials, seven patient deaths (grade 5) that were possibly related to the *varlitinib* treatment occurred. One death was related to disease progression (worsening of metastatic breast cancer), one death was related to acute kidney injury, one death was due to liver failure leading to multi-organ failure and sepsis, one death was related to hemorrhage of upper gastrointestinal tract, one death was related to heart failure, one death was related to polymicrobial bacteremia due to hepatobiliary sepsis and one death was related to condition deterioration with suspected cholangiogenic infection. These deaths were reported to the appropriate regulatory authorities as “possibly related” to *varlitinib* because the immediate cause of the patient’s death could not be determined, and therefore, a relationship to *varlitinib* could not be excluded.

Serious adverse events observed in any of our clinical trials may adversely impact our ability to obtain regulatory approval for our product candidates. Further, if any of our approved products cause serious or unexpected side effects after receiving market approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw their approval of the product or impose restrictions on its distribution;
- regulatory authorities may require the addition of labeling statements, such as warnings or contraindications;
- we may be required to change the way the product is administered or conduct additional clinical studies;
- we could be sued and held liable for harm caused to patients; or
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product candidate and could substantially increase the costs of commercializing our product candidates.

The regulatory approval processes of the U.S. FDA, NMPA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.

The time required to obtain approval by the U.S. FDA, NMPA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. For example, we cannot guarantee that our ongoing pivotal clinical trials of *varlitinib* in biliary tract cancer will be sufficient to warrant accelerated approval or that our Phase 2 clinical trials of ASLAN003 in AML or Phase 1 clinical trials of ASLAN004 in atopic dermatitis will be sufficient to allow subsequent development or that the U.S. FDA or comparable foreign regulatory authorities will not require additional or different clinical trials prior to subsequent development of ASLAN003 or ASLAN004 or that the required primary endpoints in subsequent pivotal trials or other clinical trials will be different than those in Phase 2 clinical trials.

Our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the U.S. FDA or comparable foreign regulatory authorities may disagree with the design, scope or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the U.S. FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the U.S. FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the U.S. FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;

- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of an NDA, BLA or other submission or to obtain regulatory approval in the United States or elsewhere;
- the U.S. FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the U.S. FDA or comparable foreign regulatory authorities may change significantly in a manner rendering our clinical data insufficient for approval.

This lengthy approval process, as well as the unpredictability of future clinical trial results, may result in our failing to obtain regulatory approval to market our product candidates, which would harm our business, results of operations and prospects significantly.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our products, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could harm the commercial prospects for our product candidates.

We have not previously submitted an NDA, BLA or any similar drug approval filing to the U.S. FDA or any comparable foreign authority for any product candidate, and we cannot be certain that any of our product candidates will be successful in clinical trials or receive regulatory approval. Further, our product candidates may not receive regulatory approval even if they are successful in clinical trials. If we do not receive regulatory approvals for our product candidates, we may not be able to continue our operations. Even if we successfully obtain regulatory approvals to market one or more of our product candidates, our revenue will be dependent, to a significant extent, upon the size of the markets in the territories for which we gain regulatory approval. If the markets for patients or indications that we are targeting are not as significant as we estimate, we may not generate significant revenue from sales of such products, if approved.

Pharmaceutical companies in China are required to comply with extensive regulations and hold a number of permits and licenses to carry on their business. Our ability to obtain and maintain these regulatory approvals is uncertain, and future government regulation may place additional burdens on our efforts to commercialize our product candidates.

The pharmaceutical industry in China is subject to extensive government regulation and supervision. The regulatory framework addresses all aspects of operating in the pharmaceutical industry, including approval, registration, production, distribution, packaging, labelling, storage and shipment, advertising, licensing and certification requirements and procedures, periodic renewal and reassessment processes, registration of new drugs and environmental protection. In order to commercialize our product candidates and manufacture and distribute pharmaceutical products in China, we are required to:

- obtain a pharmaceutical manufacturing permit and good manufacturing practices, or cGMP, certificate for each production facility from the NMPA and its relevant branches for trading and distribution of drugs not manufactured by the drug registration certificate holder;
- obtain a drug registration certificate, which includes a drug approval number, from the NMPA for each drug manufactured by us;

- obtain a pharmaceutical distribution permit and good supply practice, or GSP, certificate from the NMPA and its relevant branches; and
- renew the pharmaceutical manufacturing permits, the pharmaceutical distribution permits, drug registration certificates, cGMP certificates and GSP certificates every five years, among other requirements.

If we are unable to obtain or renew such permits or any other permits or licenses required for our operations, will not be able to engage in the commercialization, manufacture and distribution of our product candidates and our business may be adversely affected.

The regulatory framework governing the pharmaceutical industry in China is subject to change and amendment from time to time. The Chinese government has introduced various reforms to the Chinese healthcare system in recent years and may continue to do so, with an overall objective to expand basic medical insurance coverage and improve the quality and reliability of healthcare services. The specific regulatory changes under the reform still remain uncertain. The implementing measures to be issued may not be sufficiently effective to achieve the stated goals, and as a result, we may not be able to benefit from such reform to the level we expect, if at all. Moreover, the reform could give rise to regulatory developments, such as more burdensome administrative procedures, which may have an adverse effect on our business and prospects.

Even if we obtain regulatory approval for our product candidates, we will still face extensive regulatory requirements and our products may face future development and regulatory difficulties.

Even if we obtain regulatory approval in the United States, China or other markets, the U.S. FDA, NMPA or other regulatory authorities, as applicable, may still impose significant restrictions on the indicated uses or marketing of our product candidates, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance. Our product candidates, if approved, will also be subject to ongoing U.S. FDA, NMPA and/ or other applicable regulatory requirements governing the labeling, packaging, storage, distribution, safety surveillance, advertising, promotion, record-keeping and reporting of safety and other post-market information. The holder of an approved NDA or BLA is obligated to monitor and report AEs and any failure of a product to meet the specifications in the NDA or BLA, as applicable. The holder of an approved NDA or BLA must also submit new or supplemental applications and obtain U.S. FDA approval for certain changes to the approved product, product labeling or manufacturing process. Advertising and promotional materials must comply with U.S. FDA rules and are subject to U.S. FDA review, in addition to other potentially applicable federal and state laws.

In addition, manufacturers of drug products and their facilities are subject to payment of user fees and continual review and periodic inspections by the U.S. FDA, NMPA and other regulatory authorities for compliance with current good manufacturing practices, or cGMP, and adherence to commitments made in the NDA. If we or a regulatory agency discovers previously unknown problems with a product, such as AEs of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions relative to that product or the manufacturing facility, including requiring recall or withdrawal of the product from the market or suspension of manufacturing.

If we fail to comply with applicable regulatory requirements following approval of a product candidate, a regulatory agency may:

- issue a warning letter asserting that we are in violation of the law;
- seek an injunction or impose civil or criminal penalties or monetary fines;

- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve a pending NDA or supplements to an NDA submitted by us;
- seize product; or
- refuse to allow us to enter into supply contracts, including government contracts.

In particular, we may seek accelerated approval from the U.S. FDA for our product candidates which will likely require a further confirmatory trial. If this confirmatory trial is not successful, we will be required to withdraw our product candidate from the U.S. market and potentially other markets. For instance, we intend to seek accelerated approval for *varlitinib* in second-line biliary tract cancer.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize our products and generate revenue.

In addition, if any of our product candidates are approved and we are found to have improperly promoted off-label uses of those products, we may become subject to significant liability. The U.S. FDA and other regulatory agencies strictly regulate the promotional claims that may be made about prescription products, such as our product candidates, if approved. In particular, a product may not be promoted for uses that are not approved by the U.S. FDA or such other regulatory agencies as reflected in the product's approved labeling. However, companies may share truthful and not misleading information that is otherwise consistent with the product's FDA approved labeling. For example, if we receive marketing approval for *varlitinib* as a treatment for biliary tract cancer, physicians may nevertheless use our product for their patients in a manner that is inconsistent with the approved label. If we are found to have promoted such off-label uses, we may become subject to significant liability, which would materially adversely affect our business and financial condition.

Even if we obtain U.S. FDA approval for our product candidates in the United States, we may never obtain approval to commercialize our product candidates outside of the United States, which would limit our ability to realize their full market potential.

In order to market any products outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods.

Seeking foreign regulatory approval could result in difficulties and costs for us and require additional non-clinical studies or clinical trials which could be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our products in those countries. We do not have any product candidates approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approvals in international markets are delayed, our target market will be reduced and our ability to realize the full market potential of our products will be harmed.

If we fail to develop, acquire or in-license other product candidates or products, our business and prospects will be limited.

Our long-term growth strategy is to develop, acquire or in-license and commercialize a portfolio of product candidates in addition to *varlitinib* and our other existing product candidates. Identifying, selecting and acquiring or licensing promising product candidates requires substantial technical, financial and human resources expertise. Efforts to do so may not result in the actual development, acquisition or license of a particular product candidate, potentially resulting in a diversion of our management's time and the expenditure of our resources with no resulting benefit. If we are unable to add additional product candidates to our pipeline, our long-term business and prospects will be limited.

We rely on third parties to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed.

We have relied upon and plan to continue to rely upon third-party CROs to conduct our preclinical studies and clinical trials, including investigator-initiated studies sponsored by the investigator's institution, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs does not relieve us of our regulatory responsibilities. We and our CROs are required to comply with U.S. FDA laws and regulations regarding current good clinical practice, or cGCP, which are also required by the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities in the form of International Council for Harmonization, or ICH, guidelines for all of our products in clinical development. Regulatory authorities enforce cGCP through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs fail to comply with applicable cGCP, the clinical data generated in our clinical trials may be deemed unreliable and the U.S. FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with cGCP regulations. In addition, our U.S. clinical trials must be conducted with product produced under cGMP regulations. While we have agreements governing activities of our CROs, we have limited influence over their actual performance. In addition, portions of the clinical trials for our product candidates are expected to be conducted at various locations great distances from where our principal operations are located in Singapore, which will make it more difficult for us to monitor CROs and perform visits of our clinical trial sites and will force us to rely heavily on CROs to ensure the proper and timely conduct of our clinical trials and compliance with applicable regulations, including cGCP. Failure to comply with applicable regulations in the conduct of the clinical trials for our product candidates may require us to repeat clinical trials, which would delay the regulatory approval process.

Some of our CROs have an ability to terminate their respective agreements with us if, among other reasons, it can be reasonably demonstrated that the safety of the subjects participating in our clinical trials warrants such termination, if we make a general assignment for the benefit of our creditors or if we are liquidated. If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. In addition, our CROs are not our employees, and except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our preclinical and clinical programs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. Consequently, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase substantially and our ability to generate revenue could be delayed significantly.

Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects.

Risks Related to Our Business Operations and Industry

Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on the principal members of our executive team listed under “Management” located elsewhere in this Annual Report, the loss of whose services may adversely impact the achievement of our objectives. While we have entered into employment agreements with each of our executive officers, any of them could leave our employment at any time, subject to any applicable notice requirements. Recruiting and retaining other qualified employees for our business, including scientific and technical personnel, will also be critical to our success. Competition for skilled personnel is intense and the turnover rate can be high. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical companies for individuals with similar skill sets. In addition, failure to succeed in clinical studies may make it more challenging to recruit and retain qualified personnel. The inability to recruit or loss of the services of any executive or key employee might impede the progress of our development and commercialization objectives.

We will need to expand our organization, and we may experience difficulties in managing this growth, which could disrupt our operations.

As of December 31, 2018, we had 56 full-time employees. In connection with our January 2019 corporate restructuring plan, we reduced our total workforce by approximately 30%. In the future we may expand our employee base to increase our managerial, scientific, clinical, operational, financial and other resources, to add a sales and marketing function and to hire more consultants and contractors. Future growth would impose significant additional responsibilities on our management, including the need to identify, recruit, maintain, motivate and integrate additional employees, consultants and contractors. Also, our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. We may not be

able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Future growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of our existing or future product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and grow revenue could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize our product candidates, if approved, and compete effectively will depend, in part, on our ability to effectively manage any future growth.

We may undertake internal restructuring activities in the future that could result in disruptions to our business or otherwise materially harm our results of operations or financial condition.

From time to time we may undertake internal restructuring activities as we continue to evaluate and attempt to optimize our cost and operating structure in light of developments in our business strategy and long-term operating plans. For example, we initiated a corporate restructuring in January 2019 that resulted in a reduction in our workforce. Any such restructuring activities may result in write-offs or other restructuring charges. There can be no assurance that any restructuring activities that we have undertaken or undertake in the future will achieve the cost savings, operating efficiencies or other benefits that we may initially expect. Restructuring activities may also result in a loss of continuity, accumulated knowledge and inefficiency during transitional periods and thereafter. In addition, internal restructurings can require a significant amount of time and focus from management and other employees, which may divert attention from commercial operations. If any internal restructuring activities we have undertaken or undertake in the future fail to achieve some or all of the expected benefits therefrom, our business, results of operations and financial condition could be materially and adversely affected.

The terms of our Loan Agreement with CSL Finance place restrictions on our operating and financial flexibility. If we raise additional capital through debt financing, the terms of any new debt could further restrict our ability to operate our business.

In connection with the license agreement with CSL Limited related to ASLAN004, in May 2014 we entered into a loan agreement with CSL Finance Pty Ltd, or CSL Finance, pursuant to which CSL Finance agreed to provide a ten-year facility for \$4.5 million, or the CSL Facility. Borrowings under the CSL Facility are unsecured and can be used to reimburse a portion of eligible invoices for certain research and development costs or expenses incurred by us in connection with developing ASLAN004 and approved by CSL Finance at each drawdown period. In addition, we are required to mandatorily prepay amounts outstanding if we receive any income or revenue in connection with the commercialization or out-licensing of any intellectual property rights (other than under the license agreement with CSL Limited related to ASLAN004), in which case we are required to apply at least a low double digit percentage of such income or revenue against any amounts then-outstanding under the CSL Facility. Under the CSL Facility, we are subject to customary reporting and restrictive covenants. If an event of default occurs, CSL Finance can terminate the commitment under the CSL Facility and accelerate all amounts outstanding.

Further, if we are liquidated, CSL Finance's right to repayment would be senior to the rights of the holders of our ordinary shares to receive any proceeds from the liquidation. Any declaration by CSL Finance of an event of default could significantly harm our business and prospects and could cause the price of our ordinary shares to decline. If we raise any additional debt financing, the terms of such additional debt could further restrict our operating and financial flexibility.

We face potential product liability, and, if successful claims are brought against us, we may incur substantial liability.

The use of our product candidates in clinical trials and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, healthcare providers, pharmaceutical companies or others selling or otherwise coming into contact with our products and product candidates. If we cannot successfully defend against product liability claims, we could incur substantial liability and costs. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- impairment of our business reputation;
- withdrawal of clinical trial participants;
- costs due to related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants;
- the inability to commercialize our product candidates; and
- decreased demand for our product candidates, if approved for commercial sale.

Our current clinical trial liability insurance coverage may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and in the future we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If and when we obtain marketing approval for our product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. On occasion, large judgments have been awarded in class action lawsuits based on drugs that had unanticipated adverse effects. A successful product liability claim or series of claims brought against us could cause the price of our ADSs or ordinary shares to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business.

Our internal computer systems, or those of our CROs or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our operations.

Despite the implementation of security measures, our internal computer systems and those of our CROs and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Such events could cause interruptions of our operations. For instance, the loss of preclinical study or clinical trial data involving our product candidates could result in delays in our development and regulatory filing efforts and significantly increase our costs. In addition, theft or other exposure of data may interfere with our ability to protect our intellectual property, trade secrets, and other information critical to our operations. We can provide no assurances that certain sensitive and proprietary information relating to one or more of our product candidates has not been, or will not in the future be, compromised. There can be no assurances we will not experience unauthorized intrusions into our computer systems, or those of our CROs and other contractors and consultants, that we will successfully detect future unauthorized intrusions in a timely manner, or that future unauthorized intrusions will not result in material adverse effects on our financial condition, reputation, or business prospects.

Certain data breaches must also be reported to affected individuals and the government, and in some cases to the media, under provisions of the U.S. Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, other U.S. federal and state law, and requirements of non-U.S. jurisdictions, including the European Union Data Protection Directive, and financial penalties may also apply.

Our insurance policies may not be adequate to compensate us for the potential losses arising from breaches, failures or disruptions of our infrastructure, catastrophic events and disasters or otherwise. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all. Further, our insurance may not cover all claims made against us and defending a suit, regardless of its merit, could be costly and divert management's attention.

Furthermore, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on other third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business.

In addition to in-licensing or acquiring product candidates, we may engage in future business acquisitions that could disrupt our business, cause dilution to our ADS holders and harm our financial condition and operating results.

While we currently have no specific plans to acquire any other businesses, we have, from time to time, evaluated acquisition opportunities and may, in the future, make acquisitions of, or investments in, companies that we believe have products or capabilities that are a strategic or commercial fit with our current product candidates and business or otherwise offer opportunities for our company. In connection with these acquisitions or investments, we may:

- issue shares that would dilute our ADS holders' percentage of ownership;
- incur debt and assume liabilities; and
- incur amortization expenses related to intangible assets or incur large write-offs.

We also may be unable to find suitable acquisition candidates and we may not be able to complete acquisitions on favorable terms, if at all. If we do complete an acquisition, we cannot assure you that it will ultimately strengthen our competitive position or that it will not be viewed negatively by customers, financial markets or investors. Further, future acquisitions could also pose numerous additional risks to our operations, including:

- problems integrating the purchased business, products or technologies;
- increases to our expenses;
- the failure to have discovered undisclosed liabilities of the acquired asset or company;
- diversion of management's attention from their day-to-day responsibilities;
- harm to our operating results or financial condition;
- entrance into markets in which we have limited or no prior experience; and
- potential loss of key employees, particularly those of the acquired entity.

We may not be able to complete one or more acquisitions or effectively integrate the operations, products or personnel gained through any such acquisition without a material adverse effect on our business, financial condition and results of operations.

Our Asia development platform is unproven and may not result in the competitive advantages we anticipate.

We have built a development platform centered in Asia that is designed to enable us to accelerate the development of drugs which target Asia prevalent diseases and which we believe can generate data suitable for submission to regulators in the United States, Europe, China and Japan. Although data collected in Asia from the *varlitinib* biliary tract cancer clinical trial as well as other *varlitinib* clinical data have been submitted to a number of regulatory authorities, including the U.S. FDA, the NMPA, the Pharmaceutical and Medical Devices Agency, or PMDA, the Health Sciences Authority in Singapore, the Taiwan Food and Drug Administration and the Ministry of Food and Drug Safety in South Korea, and after reviewing the data these health authorities have each agreed to include patients from their respective countries in the *varlitinib* biliary tract cancer clinical trials, we cannot guarantee this result will hold true in the future. Regulatory authorities could potentially reject Asia data if they believe that the Asian disease population is substantially different from the disease population in their particular country. Furthermore, while we have shown in certain cases that the pharmacokinetics in Asian and Caucasian patients are similar, we cannot guarantee that this will hold true more generally or in the future, or with respect to other ethnicities. While we believe our platform in Asia offers us an opportunity to accelerate the development of novel therapies in diseases where either the diseases are more prevalent or the availability of suitable patients in clinical trials is greater, an Asia-focused development platform is a relatively novel approach to drug development and has not yet resulted in a proven track record of accelerated development or regulatory approval.

Furthermore, drug development focused in Asia may be subject to a number of risks and uncertainties. We cannot assure you that governments of Asian countries will not enact regulations or incentives that favor local pharmaceutical companies over foreign-owned pharmaceutical companies. Any developments in Asia that make clinical development costlier or more time-consuming could delay our development timelines and materially harm our business and results of operations.

Our operations across Asia could be subject to natural disasters, health epidemics and other business disruptions, which could have a material adverse effect on our business, results of operation and financial condition.

Our operations, and in particular our clinical trials, are being conducted across areas of Asia that may be prone to natural disasters, such as earthquakes, cyclones, monsoons and floods, which could cause interruptions to our operations. In addition, the areas in which our clinical trials could be adversely affected by the outbreak of influenza A (H1N1), avian influenza (H7N9), severe acute respiratory syndrome (SARS) or other pandemics.

Any occurrence of these natural disasters or pandemic diseases or other adverse public health developments in the areas in which we operate our clinical trials could disrupt or delay our business operations or clinical development, which could materially adversely affect our business.

Our business is subject to economic, political, regulatory and other risks associated with international operations.

As a company based in Singapore with an Asia based development platform, our business is subject to risks associated with conducting business outside of the United States. Many of our suppliers and collaborative and clinical trial relationships are located outside the United States. Accordingly, our future results could be harmed by a variety of factors, including:

- economic weakness, including inflation, or political instability;
- differing and changing regulatory requirements for drug approvals;
- differing jurisdictions could present different issues for securing, maintaining or obtaining freedom to operate in such jurisdictions;
- potentially reduced protection for intellectual property rights;
- difficulties in compliance with local laws and regulations;
- changes in local regulations and customs, tariffs and trade barriers;
- changes in currency exchange rates, including the Singapore dollar, and currency controls;
- changes in a specific country's or region's political or economic environment;
- the relationship between Singapore and other countries, including China;
- trade protection measures, import or export licensing requirements or other restrictive actions;
- differing reimbursement regimes and price controls;
- negative consequences from changes in tax laws;
- compliance with tax, employment, immigration and labor laws for employees;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- difficulties associated with staffing and managing international operations, including differing labor relations;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities; and
- business interruptions resulting from geo-political actions, including war and terrorism, or natural disasters including typhoons, floods and fires.

More specifically, the economy in Asia differs from most developed markets in many respects, including the level of government involvement, level of development, growth rate, control of foreign exchange, government policy on public order and allocation of resources. In some of the Asian markets, governments continue to play a significant role in regulating industry development by imposing industrial policies. Moreover, some local governments also exercise significant control over the economic growth and public order in their respective jurisdictions through allocating resources, controlling payment of foreign currency-denominated obligations, setting monetary policies, and providing preferential treatment to particular industries or companies. In addition, some Asian markets have experienced, and may in the future experience, political instability, including strikes, demonstrations, protests, marches, coups d'état, guerilla activity or other types of civil disorder. These instabilities and any adverse changes in the political environment could increase our costs, increase our exposure to legal and business risks, or disrupt our clinical operations.

European data collection is governed by restrictive regulations governing the use, processing, and cross-border transfer of personal information.

The collection and use of personal data in the European Union are governed by the General Data Protection Regulation, or GDPR. The GDPR imposes stringent requirements for controllers and processors of personal data, including, for example, more robust disclosures to individuals and a strengthened individual data rights regime, shortened timelines for data breach notifications, limitations on retention of information, increased requirements pertaining to special categories of data, such as health data, and additional obligations when we contract with third-party processors in connection with the processing of the personal data. The GDPR also imposes strict rules on the transfer of personal data out of the European Union to the United States and other third countries. In addition, the GDPR provides that European Union member states may make their own further laws and regulations limiting the processing of personal data, including genetic, biometric or health data.

The GDPR applies extraterritorially, and we may be subject to the GDPR because of our data processing activities that involve the personal data of individuals located in the European Union, such as in connection with any European Union clinical trials. Failure to comply with the requirements of the GDPR and the applicable national data protection laws of the European Union member states may result in fines of up to €20,000,000 or up to 4% of the total worldwide annual turnover of the preceding financial year, whichever is higher, and other administrative penalties. GDPR regulations may impose additional responsibility and liability in relation to the personal data that we process and we may be required to put in place additional mechanisms to ensure compliance with the new data protection rules. This may be onerous and may interrupt or delay our development activities, and adversely affect our business, financial condition, results of operations and prospects.

Risks Related to Our Intellectual Property

If we are unable to obtain or protect intellectual property rights related to our current product candidates or any future product candidates which we may develop, we may not be able to compete effectively in our market.

We rely upon a combination of patents, trade secret protection, confidentiality agreements and proprietary know-how, and intend to seek marketing exclusivity for any approved product, in order to protect the intellectual property related to product candidates. The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our product candidates in the United States or in other foreign countries for a number of reasons, including because of a finding of lack of novelty or that the claimed inventions are already in the public domain. If this were to occur, early generic competition could be expected against our product candidates. Even if patents do successfully issue, third parties may challenge their validity, enforceability or scope, which may result in such patents being invalidated or deemed as not infringing. Also, a third party may challenge our ownership of patents and patent applications assigned to us, or may challenge our exclusive rights to patents and patent applications that we license from third parties. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing around our claims. If the patent applications we hold with respect to our other product candidates fail to issue or if their breadth or strength of protection is threatened, it could dissuade companies from collaborating with us to develop them, and threaten our ability to commercialize any resulting products. We cannot offer any assurances about which, if any, applications will issue as patents or whether any issued patents will be found not invalid and not unenforceable or will go unthreatened by third parties. Further, if we encounter delays in regulatory approvals, the period of time during which we could market our product candidates under patent protection could be reduced. Furthermore, patent applications by third parties can result in an interference proceeding in the United States being invoked by a third party or instituted by us to determine who was the first to invent any of the subject matter covered by the patent claims of our applications or patents.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of our drug development process that involve proprietary know-how, information or technology that is not covered by patents. Although we generally require all of our employees to assign their inventions to us, and all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information or technology to enter into confidentiality agreements, we cannot provide any assurances that all such agreements have been duly executed or that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. If we are unable to prevent material disclosure of the non-patented intellectual property related to our technologies to third parties, and there is no guarantee that we will have any such enforceable trade secret protection, we may not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, results of operations and financial condition.

We may not be able to protect our intellectual property and proprietary rights throughout the world.

Filing, prosecuting, and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection but enforcement is not as strong as that in the United States. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our intellectual property and proprietary rights generally. Proceedings to enforce our intellectual property and proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly, could put our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property and proprietary rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Several countries have compulsory licensing laws under which, in certain circumstances, a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors is forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations, and prospects may be adversely affected.

In China, the validity, enforceability and scope of protection available under the relevant intellectual property laws are uncertain and still evolving. Implementation and enforcement of Chinese intellectual property-related laws have historically been inconsistent. Accordingly, intellectual property and confidentiality legal regimes in China may not afford protection to the same extent as in the United States or other countries. Policing unauthorized use of proprietary technology is difficult and expensive, and we may need to resort to litigation to enforce or defend patents issued to us or to determine the enforceability, scope and validity of our proprietary rights or those of others. The experience and capabilities of Chinese courts in handling intellectual property litigation varies, and outcomes are unpredictable. Further, such litigation may require a significant expenditure of cash and may divert management's attention from our operations, which could harm our business, financial condition and results of operations. An adverse determination in any such litigation could materially impair our intellectual property rights and may harm our business, prospects and reputation in China.

If we fail to comply with our obligations in the agreements under which we license rights to technology from third parties, or if the license agreements are terminated for other reasons, we could lose license rights that are important to our business.

We are a party to a number of technology licenses that are important to our business and expect to enter into additional licenses in the future. For example, our rights to *varlitinib* are the subject of an exclusive license agreement with Array. If we fail to comply with our obligations under our agreement with Array (including, among other things, if we fail to use commercially reasonable efforts to develop and commercialize *varlitinib*) or our other license agreements, or we are subject to insolvency or liquidation, the licensor may have the right to terminate the license. In addition, under our agreement with Array, in the event of a change of control, we may be required to make additional payment to Array if the change of control meets specified conditions. In the event that any of our important technology licenses were to be terminated by the licensor, we would likely cease further development of the related program. See "Item 4.B. Information on the Company - Business overview—License and Collaboration Agreements" for a description of our license agreements, which includes a description of the termination provisions of these agreements.

We are generally also subject to all of the same risks with respect to protection of intellectual property that we license, as we are for intellectual property that we own, which are described elsewhere under "Risks Related to Our Intellectual Property." If we or our licensors fail to adequately protect this intellectual property, our ability to commercialize products could suffer.

Third-party claims of intellectual property infringement may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions and inter party reexamination proceedings before the U.S. Patent and Trademark Office, or the USPTO. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we and our collaborators are developing product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our product candidates, any drug substance formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtain a license under the applicable patents, or until such patents are invalidated or expire. Similarly, if any third-party patent were held by a court of competent jurisdiction to cover aspects of our formulations or methods of use, the holders of any such patent may be able to block our ability to develop and commercialize the applicable product candidate formulation or use unless we obtain a license or until such patent expires. In either case, such a license may not be available on commercially reasonable terms or at all.

Parties making claims against us may request and/or obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our infringing products or manufacturing processes, which may be impossible or require substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research, manufacture clinical trial supplies or allow commercialization of our product candidates. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize one or more of our product candidates, which could harm our business significantly. We cannot provide any assurances that third-party patents do not exist which might be enforced against our products, resulting in either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents or the patents of our licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours or our licensors is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Interference proceedings provoked by third parties or brought by us may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our collaborators or licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our defense of litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, alone or with our licensors, misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our ADSs.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can (i) result in abandonment or lapse of, or (ii) otherwise affect the patentability of, the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors that control the prosecution and maintenance of our licensed patents fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market, which would have a material adverse effect on our business.

In addition, as licensees we may not be responsible for or have control over the prosecution or enforceability of our licensed patents. In such cases, we have to rely on the licensor to comply with the requisite obligations of the patent offices, including the duty of disclosure, filing assignments, etc. We cannot guarantee that all of these duties have been or will be complied with. As licensees, we may not be in a position to assess if these duties have been complied with or have the ability to complete these duties on behalf of the licensor. Failure to comply with such duties may affect the enforceability of the patent rights.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We employ individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of our employees' former employers or other third parties. We may also be subject to claims that former employers or other third parties have an ownership interest in our patents. Litigation may be necessary to defend against these claims. There is no guarantee of success in defending these claims, and if we are successful, litigation could result in substantial cost and be a distraction to our management and other employees.

Although we have obtained orphan drug designation for varlitinib in gastric cancer and cholangiocarcinoma, a form of biliary tract cancer, and for ASLAN003 in AML in the United States, we may not be able to obtain or maintain the benefits associated with orphan drug status, including market exclusivity.

Regulatory authorities in some jurisdictions, including the United States and the European Union, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the U.S. FDA may designate a drug as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the United States. We have obtained orphan drug designation for *varlitinib* in gastric cancer and cholangiocarcinoma from the U.S. FDA, as well as for *varlitinib* in biliary tract cancer from the Ministry of Food and Drug Safety in South Korea. We have also obtained orphan drug designation from the U.S. FDA for ASLAN003 in AML. Generally, if a drug with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the drug may be entitled to a period of marketing exclusivity, which precludes the U.S. FDA from approving another marketing application for the same molecule for the same indication for that time period. We can provide no assurance that another drug will not receive marketing approval prior to our product candidates. The applicable period is seven years in the United States and ten years in Japan and the European Union. The exclusivity period in the European Union can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the U.S. FDA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition. In addition, even after a drug is granted orphan exclusivity and approved, the U.S. FDA can subsequently approve another drug for the same condition before the expiration of the seven year exclusivity period if the U.S. FDA, concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

If our trademarks and tradenames are not adequately protected, then we may not be able to build name recognition in our markets and our business may be adversely affected.

We have registered or applied to register certain trademarks to protect our company name and plan to apply to register trademarks to cover product names in the future once our product candidates are closer to commercialization. We cannot assure you that our trademark applications will be approved or that we will seek registered trademark protection for each of our product names in each jurisdiction in which we operate. During trademark registration proceedings, we may receive rejections. Although we are given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in proceedings before the USPTO and in proceedings before comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek

to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. In the event that our trademarks are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition and could require us to devote resources toward advertising and marketing new brands. Further, we cannot assure you that competitors will not infringe our trademarks or that we will have adequate resources to enforce our trademarks.

Risks Related to Commercialization of Our Product Candidates

Our commercial success depends upon attaining significant market acceptance of our product candidates, if approved, among physicians, healthcare payors, patients and the medical community.

Even if we obtain regulatory approval for our product candidates, the product may not gain market acceptance among physicians, healthcare payors, patients and the medical community, which is critical to commercial success. Market acceptance of any product candidate for which we receive approval depends on a number of factors, including:

- the efficacy and safety as demonstrated in clinical trials;
- the timing of market introduction of the product candidate as well as competitive products;
- the clinical indications for which the product candidate is approved;
- acceptance by physicians, the medical community and patients of the product candidate as a safe and effective treatment and also the willingness of physicians to prescribe a drug based on an active pharmaceutical ingredient, or API, that is less familiar to them than other drug APIs;
- the convenience of prescribing and initiating patients on the product candidate;
- the potential and perceived advantages of such product candidate over alternative treatments;
- the cost of treatment in relation to alternative treatments, including any similar generic treatments;
- favorable pricing and the availability of coverage and adequate reimbursement by third-party payors, such as government authorities;
- relative convenience and ease of administration;
- the prevalence and severity of adverse side effects; and
- the effectiveness of sales and marketing efforts.

If our product candidates are approved but fail to achieve an adequate level of acceptance by physicians, healthcare payors, patients and the medical community, we will not be able to generate significant revenue, and we may not become or remain profitable. In addition, even if any of our product candidates gain acceptance, the markets for the treatment of patients with our target indications may not be as significant as we estimate.

Our organization has no prior sales and marketing experience and resources.

We have never, as an organization, commercialized a product and there is no guarantee that we will be able to do so successfully. We will need to establish a commercial team and hire sales forces in the geographies where we are permitted and intend to market our drugs. We will also need to develop a marketing team and strategy in order to successfully market and sell our product candidates, which will require significant time and resources and the development of our ability to market and sell our product and generate revenues from our product candidates may be delayed or limited. We cannot assure you that our sales efforts will be effective or produce the results we expect. We will be competing with other pharmaceutical and biotechnology companies to recruit, hire, train and retain marketing and sales personnel. Further, we may face difficulties or delays in obtaining and maintaining the required licenses and permits to sell our product candidates in individual states and jurisdictions. If our commercialization of *varlitinib* or our other product candidates is unsuccessful or perceived as disappointing, the price of our ADSs could decline significantly and the long-term success of the product and our company could be harmed.

We may also seek to establish collaborations with pharmaceutical companies to maximize the potential of our products in other markets. For example, we are conducting a Phase 1 clinical trial to develop ASLAN004 in atopic dermatitis, and, in the future, we may seek a global partner to support Phase 3 clinical trials and potential commercialization. We may not be successful in establishing development and commercialization collaborations which could adversely affect, and potentially prohibit, our ability to develop our product candidates.

If our planned targeted commercial organization in the United States and selected Asian markets is not as successful as we anticipate, we may be unable to generate any revenue.

Although we have started building a targeted commercial organization, we currently have a very limited commercial organization and capability, and the cost of establishing and maintaining such an organization may exceed the cost-effectiveness of doing so. In order to market any products that may be approved, we must build sales, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. We may enter into strategic partnerships with third parties to commercialize our product candidates.

Part of our business strategy is to establish collaborative relationships to commercialize and fund development and approval of certain of our product candidates. We may not succeed in establishing and maintaining collaborative relationships, which may significantly limit our ability to develop and commercialize products, for which we pursue this commercialization strategy.

We will need to establish and maintain successful collaborative relationships to obtain sales, marketing and distribution capabilities for the product candidates we do not intend to commercialize ourselves. The process of establishing and maintaining collaborative relationships is difficult, time-consuming and involves significant uncertainty, including:

- we may have limited control over the decisions of any partners and they may change the priority of any programs in a manner that would result in termination or significant delays to a partnered program;
- our ability to generate future payments and royalties from any partners will depend upon the ability of a partner to obtain regulatory approvals and achieve market acceptance of products developed from our product candidates;

- a partner may fail to properly initiate, maintain or defend our intellectual property rights, where applicable, or a party may use our proprietary information in such a way as to invite litigation that could jeopardize or potentially invalidate our proprietary information or expose us to potential liability;
- a partner may not devote sufficient capital or resources towards our product candidates; and,
- a partner may not comply with applicable government regulatory requirements necessary to successfully market and sell our products.

If any collaborator fails to fulfill its responsibilities in a timely manner, or at all, any clinical development, manufacturing or commercialization efforts pursuant to that collaboration could be delayed or terminated, or it may be necessary for us to assume responsibility for expenses or activities that would otherwise have been the responsibility of our collaborator. If we are unable to establish and maintain collaborative relationships on acceptable terms or to successfully and timely transition terminated collaborative agreements, we may have to delay or discontinue further development of one or more of our product candidates, undertake development and commercialization activities at our own expense or find alternative sources of capital.

Attempting to secure additional financing for a product candidate may also lead to the risks discussed under the risk factor titled “We will need to obtain substantial amounts of financing for our operations, and if we fail to obtain additional financing, we may be forced to delay, reduce or eliminate our product development programs or commercialization efforts” described above.

We rely completely on third parties to manufacture our preclinical and clinical drug supplies and we intend to rely on third parties to produce commercial supplies of any approved product candidate.

If we were to experience an unexpected loss of supply of our product candidates for any reason, whether as a result of manufacturing, supply or storage issues or otherwise, we could experience delays, disruptions, suspensions or terminations of, or be required to restart or repeat, clinical trials. We do not currently have nor do we plan to acquire the infrastructure or capability internally to manufacture our preclinical and clinical drug supplies and we lack the resources and the capability to manufacture any of our product candidates on a clinical or commercial scale. The facilities used by our contract manufacturers or other third-party manufacturers to manufacture our product candidates must be approved by the U.S. FDA, NMPA or other regulators pursuant to inspections. While we work closely with our third-party manufacturers on the manufacturing process for our product candidates, including quality audits, we generally do not control the implementation of the manufacturing process of, and are completely dependent on, our contract manufacturers or other third-party manufacturers for compliance with cGMP regulatory requirements and for manufacture of both active drug substances and finished drug products. If our contract manufacturers or other third-party manufacturers cannot successfully manufacture material that conforms to applicable specifications and the strict regulatory requirements of the U.S. FDA, NMPA or other regulators, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers or other third-party manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the U.S. FDA, NMPA or other regulators do not approve these facilities for the manufacture of our product candidates or if they withdraw any such approval in the future, we may need to find alternative manufacturing facilities, which could take several years and would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved.

We rely on our manufacturers to purchase from third-party suppliers the materials necessary to produce our product candidates for our clinical trials. There are a limited number of suppliers for raw materials that we use to manufacture our product candidates and there may be a need to assess alternate suppliers to prevent a possible disruption of the manufacture of the materials necessary to produce our product candidates for our clinical trials, and if approved, for commercial sale. We do not have any control over the process or timing of the acquisition of these raw materials by our manufacturers. Although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a product candidate to complete the clinical trial, any significant delay in the supply of a product candidate, or the raw material components thereof, for an ongoing clinical trial due to the need to replace a contract manufacturer or other third-party manufacturer could considerably delay completion of our clinical trials, product testing and potential regulatory approval of our product candidates. If our manufacturers or we are unable to purchase these raw materials after regulatory approval has been obtained for our product candidates, the commercial launch of our product candidates would be delayed or there would be a shortage in supply, which would impair our ability to generate revenue from the sale of our product candidates.

We expect to continue to depend on contract manufacturers or other third-party manufacturers for the foreseeable future, and our requirements for and dependence upon these third-party manufacturers will increase when and if one or more of our product candidates is approved and commercialized. We have not entered into any long-term commercial supply agreements with our current contract manufacturers or with any alternate contract manufacturers. Although we intend to do so prior to any commercial launch of our product candidates, if approved by the U.S. FDA, in order to ensure that we maintain adequate supplies of finished drug product, we may be unable to enter into such an agreement or do so on commercially reasonable terms, which could have a material adverse impact upon our business, including delaying a product launch or subjecting our commercialization efforts to significant supply risk. Even if we are able to enter into long-term agreements with manufacturers for commercial supply on reasonable terms, we may be unable to do so with sufficient time prior to the launch of our product candidates, which would expose us to substantial supply risk and potentially jeopardize our launch. See “Item 4.B. Information on the Company - Business overview—Manufacturing” for additional information.

Manufacturing issues may arise that could increase product and regulatory approval costs or delay commercialization.

As we scale up manufacturing of our product candidates and conduct required stability testing, product, packaging, equipment and process-related issues may require refinement or resolution in order to proceed with our planned clinical trials and obtain regulatory approval for commercial marketing. In the future, we may identify impurities, which could result in increased scrutiny by the regulatory agencies, delays in our clinical program and regulatory approval, increases in our operating expenses, or failure to obtain or maintain approval for our product candidates.

Guidelines and recommendations published by various organizations can reduce the use of our product candidates.

Government agencies promulgate regulations and guidelines directly applicable to us and to our product candidates. In addition, professional societies, such as practice management groups, private health and science foundations and organizations involved in various diseases from time to time may also publish guidelines or recommendations to the healthcare and patient communities. Recommendations of government agencies or these other groups or organizations may relate to such matters as usage, dosage, route of administration and use of concomitant therapies. Recommendations or guidelines suggesting the reduced use of our product candidates or the use of competitive or alternative products as the standard of care to be followed by patients and healthcare providers could result in decreased use of our product candidates.

We face significant competition from other biopharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

Our industry is intensely competitive and subject to rapid and significant technological change. While we believe that our Asia based development platform, knowledge, experience and scientific resources provide us with competitive advantages, we face substantial competition from multinational pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies, universities and other research institutions worldwide. For example, there are several targeted therapies currently in clinical development targeting specific subsets of biliary tract cancer, including *ivosidenib* being developed by Agios Pharmaceuticals, Inc., ARQ087 being developed by Arqule, Inc. and *lenvatinib* being developed by Eisai Inc.

Many of our competitors have significantly greater financial, clinical and human resources. Additionally, small and early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. As a result, our competitors may discover, develop, license or commercialize products before or more successfully than we do. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing on an exclusive basis drug products or drug delivery technologies that are more effective or less costly than our product candidates that we are currently developing or that we may develop.

We believe that our ability to successfully compete will depend on, among other things:

- the efficacy and safety of our product candidates, especially as compared to marketed products and product candidates in development by third parties;
- the time it takes for our product candidates to complete clinical development and receive marketing approval;
- the ability to commercialize and market any of our product candidates that receive regulatory approval;
- the price of our products;
- whether coverage and adequate levels of reimbursement are available from third-party payors, such as private and governmental health insurance plans, including Medicare;
- the ability to protect intellectual property rights related to our product candidates;
- the ability to manufacture on a cost-effective basis and sell commercial quantities of any of our product candidates that receive regulatory approval; and
- acceptance of any of our product candidates that receive regulatory approval by physicians and other healthcare providers.

If our competitors market products that are more effective, safer or less expensive than our future products, if any, or that reach the market sooner than our future products, if any, we may not achieve commercial success. Because we have limited research and development capabilities, it may be difficult for us to stay abreast of the rapid changes in technology. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or products developed by our competitors may render our technologies or product candidates obsolete, less competitive or not economical.

Price controls may adversely affect our future profitability.

In certain countries, prescription drug pricing and reimbursement is subject to governmental control. In those countries that impose price controls, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we or our strategic partners may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidates to other available therapies.

Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In certain markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we or our strategic partners might obtain marketing approval for a product candidate in a particular country, but then be subject to price regulations that delay commercial launch of the product candidate, possibly for lengthy time periods, and negatively impact the revenue that we generate from the sale of the product in that country. If reimbursement of such product candidates is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, or if there is competition from lower priced cross-border sales, our profitability will be negatively affected.

Legislative or regulatory healthcare reforms may make it more difficult and costly for us to obtain regulatory clearance or approval of our product candidates and to produce, market and distribute our products after clearance or approval is obtained.

From time to time, legislation is drafted and introduced that could significantly change the statutory provisions governing the regulatory clearance or approval, manufacture and marketing of regulated products or the reimbursement thereof. In addition, U.S. FDA regulations and guidance are often revised or reinterpreted by the U.S. FDA in ways that may significantly affect our business and our products. Any new regulations or revisions or reinterpretations of existing regulations may impose additional costs or lengthen review times of our product candidates. We cannot determine what effect changes in regulations, statutes, legal interpretation or policies, when and if promulgated, enacted or adopted may have on our business in the future. Such changes could, among other things, require:

- changes to manufacturing methods;
- change in clinical trial design, including additional treatment arm (control);
- recall, replacement or discontinuance of one or more of our products; and
- additional recordkeeping.

Each of these would likely entail substantial time and cost and could harm our business and our financial results.

In addition, in the United States, there have been a number of legislative and regulatory proposals to change the health care system in ways that could affect our ability to sell our products profitably. The pharmaceutical industry in the United States, as an example, has been affected by the passage of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, collectively PPACA, which, among other things, imposed new fees on entities that manufacture or import certain branded prescription drugs and expanded pharmaceutical manufacturer obligations to provide discounts and rebates to certain government programs. Since its enactment, there have been judicial and Congressional challenges to certain aspects of PPACA, as well as recent efforts by the Trump administration to repeal or replace certain aspects of PPACA. Since January 2017, President Trump has signed two Executive Orders and other directives designed to delay the implementation of

certain provisions of PPACA or otherwise circumvent some of the requirements for health insurance mandated by PPACA. In addition, The Centers for Medicare and Medicaid Services, or CMS, an agency within the U.S. Department of Health and Human Services, or HHS, recently published a final rule that will give states greater flexibility in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the PPACA marketplaces. Further, Congress has considered legislation that would repeal or repeal and replace all or part of the PPACA. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the PPACA have been signed into law. The Tax Cuts and Jobs Act of 2017, or Tax Act, includes a provision that repealed, effective January 1, 2019, the tax-based shared responsibility payment imposed by the PPACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the “individual mandate”. On January 22, 2018, President Trump signed a continuing resolution on appropriations for the year ended 2018 that delayed the implementation of certain PPACA-mandated fees, including the so-called “Cadillac” tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. The Bipartisan Budget Act of 2018, or the BBA, among other things, amended the PPACA, effective January 1, 2019, to increase from 50 percent to 70 percent the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and to close the coverage gap in most Medicare drug plans, commonly referred to as the “donut hole.” In July 2018, CMS published a final rule permitting further collections and payments to and from certain PPACA qualified health plans and health insurance issuers under the PPACA risk adjustment program in response to the outcome of federal district court litigation regarding the method CMS uses to determine this risk adjustment. On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas, or Texas District Court Judge, ruled that the individual mandate is a critical and inseparable feature of the PPACA, and therefore, because it was repealed as part of the Tax Act, the remaining provisions of the PPACA are invalid as well. While the Texas District Court Judge, as well as the Trump Administration and CMS, have stated that the ruling will have no immediate effect, it is unclear how this decision, subsequent appeals, , and other efforts to repeal and replace the PPACA will impact the PPACA and our business.

Other legislative changes have been proposed and adopted in the United States since the PPACA was enacted. For example, in August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by U.S. Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2012 through 2021, was unable to reach required goals, thereby triggering the legislation’s automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of up to 2% per fiscal year, which went into effect in April 2013 and, due to subsequent legislative amendments to the statute, including the BBA, will remain in effect through 2027 unless additional Congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012, among other things, further reduced Medicare payments to certain providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Further, there has been particular and increasing legislative and enforcement interest in the United States with respect to drug pricing practices in recent years, particularly with respect to drugs that have been subject to relatively large price increases over relatively short time periods. There have been several recent Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. At the federal level, the Trump administration’s budget proposal for the year ended 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of

certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. Additionally, the Trump administration released a “Blueprint” to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug products paid by consumers. HHS has already started the process of soliciting feedback on some of these measures and, at the same, is immediately implementing others under its existing authority. For example, in September 2018, CMS announced that it will allow Medicare Advantage Plans the option to use step therapy for Part B drugs beginning January 1, 2019, and in October 2018, CMS proposed a new rule that would require direct-to-consumer television advertisements of prescription drugs and biological products, for which payment is available through or under Medicare or Medicaid, to include in the advertisement the Wholesale Acquisition Cost, or list price, of that drug or biological product.

In addition, on January 31, 2019, the HHS Office of Inspector General, proposed modifications to the U.S. Anti-Kickback Statute discount safe harbor for the purpose of reducing the cost of drug products to consumers which, among other things, if finalized, will affect discounts paid by manufacturers to Medicare Part D plans, Medicaid managed care organizations and pharmacy benefit managers working with these organizations. Although a number of these, and other proposed, measures will require additional authorization to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

Additionally, on May 30, 2018, the Trickett Wendler, Frank Mongiello, Jordan McLinn, and Matthew Bellina Right to Try Act of 2017, or the Right to Try Act, was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug products that have completed a Phase I clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a pharmaceutical manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act.

In the future, there will likely continue to be proposals relating to the reform of the U.S. healthcare system, some of which could further limit coverage and reimbursement of drug products, including our product candidates.

Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. Our results of operations could be adversely affected by PPACA and by other health care reforms that may be enacted or adopted in the future.

It may be difficult for us to profitably sell any future products that may be approved if coverage and reimbursement for these products is limited by government authorities and/or third-party payor policies.

In addition to any healthcare reform measures which may affect reimbursement, market acceptance and sales of our product candidates, if approved, will depend on, in part, the extent to which our products, and the procedures which utilize our products, will be covered by third-party payors, such as government health care programs, commercial insurance and managed care organizations. These third-party payors determine the extent to which new drugs, and the procedures which utilize new drugs, will be covered as a benefit under their plans and the level of reimbursement for any covered product and procedures utilizing such products. It is difficult to predict at this time what third-party payors will decide with respect to the coverage and reimbursement for our product candidates, and the procedures which utilize our product candidates.

A primary trend in the healthcare industry has been cost containment, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products and/or biosimilars. Third-party payors decide which drugs, and procedures using such drugs, they will pay for and establish reimbursement and co-payment levels. Government and other third-party payors are increasingly challenging the prices charged for health care products and services, examining the cost effectiveness of drugs in addition to their safety and efficacy, and limiting or attempting to limit both coverage and the level of reimbursement for prescription drugs and the procedures which utilize prescription drugs. We cannot be sure that coverage will be available for our product candidates, and the procedures which utilize our product candidates, if approved, or, if coverage is available, the level of reimbursement.

There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products, and the procedures which utilize such products. In the United States, the principal decisions about reimbursement for new medicines, and the procedures which utilize new medicines, are typically made by CMS, as CMS decides whether and to what extent a new medicine, and procedures which utilize a new medicine, will be covered and reimbursed under Medicare. Private payors may follow CMS, but have their own methods and approval processes for determining reimbursement for new medicines, and the procedures that utilize new medicines. It is difficult to predict what CMS or other payors will decide with respect to reimbursement for fundamentally novel products such as ours, as there is no body of established practices and precedents for these new products.

Reimbursement may impact the demand for, and/or the price of, any product for which we obtain marketing approval. Assuming we obtain coverage for a given product, or a procedure which utilizes a given product, by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who are prescribed medications and procedures for the treatment of their conditions, and their prescribing physicians, generally rely on third-party payors to reimburse all or part of the costs associated with those prescription drugs and procedures. Patients are unlikely to use our products, or agree to procedures utilizing our products, unless coverage is provided and reimbursement is adequate to cover all or a significant portion of the associated costs. Therefore, coverage and adequate reimbursement is critical to new product acceptance. Coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available. There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and the procedures which utilize newly approved drugs, and coverage may be more limited than the purposes for which such drug is approved by the U.S. FDA or comparable foreign regulatory authorities.

Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution.

We expect to experience pricing pressures in connection with the sale of any of our product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs, medical devices and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the successful commercialization of new products. Further, the adoption and implementation of any future governmental cost containment or other health reform initiative may result in additional downward pressure on the price that we may receive for any approved product. Reimbursement by a third-party payor may depend upon a number of factors including the third-party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Obtaining coverage and reimbursement approval for a product, or a procedure which utilizes a product, from a government or other third-party payor is a time-consuming and costly process that could require us to provide supporting scientific, clinical and cost effectiveness data for the use of our products, and the procedures which utilize our products, to the payor. Further, no uniform policy requirement for coverage and reimbursement for drug products, and procedures which utilize drug products, exists among third-party payors in the United States. Therefore, coverage and reimbursement for drug products, and the procedures which utilize drug products, can differ significantly from payor to payor. As a result, the coverage determination process may require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. We may not be able to provide data sufficient to gain acceptance with respect to coverage and/or sufficient reimbursement levels. We cannot be sure that coverage or adequate reimbursement will be available for our product candidates, or the procedures which utilize our product candidates, if approved. Also, we cannot be sure that reimbursement amounts will not reduce the demand for, or the price of, our future products. If reimbursement is not available, or is available only to limited levels, we may not be able to commercialize our product candidates, or achieve profitably at all, even if approved.

Reimbursement may not be immediately available for our product candidates in China, which could diminish our sales or affect our profitability.

In China, the Ministry of Human Resources and Social Security of China or provincial or local human resources and social security authorities, together with other government authorities, review the inclusion or removal of drugs from China's National Drug Catalog for Basic Medical Insurance, Work-related Injury Insurance and Maternity Insurance, or the National Reimbursement Drug List, or the NRDL, or provincial or local medical insurance catalogues for the National Medical Insurance Program regularly, and the tier under which a drug will be classified, both of which affect the amounts reimbursable to program participants for their purchases of those drugs. These determinations are made based on a number of factors, including price and efficacy.

We may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws and health information privacy and security laws. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

Our current and future operations may be directly or indirectly through our relationships with healthcare providers, patients and other persons and entities, subject to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we research, market, sell and distribute our products. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include:

The U.S. Anti-Kickback Statute prohibits, among other things, any person or entity from knowingly and willfully offering, paying, soliciting, receiving or providing any remuneration, directly or indirectly, overtly or covertly, to induce or in return for purchasing, leasing, ordering or arranging for or recommending the purchase, lease or order of any item or service reimbursable, in whole or in part, under Medicare, Medicaid or other U.S. federal healthcare programs. The U.S. Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers, and formulary managers, among others, on the other. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution.

The U.S. federal false claims and civil monetary penalties laws, including the False Claims Act, or FCA, which prohibit any person or entity from, among other things, knowingly presenting, or causing to be presented, a false, fictitious or fraudulent claim for payment to, or approval by, the U.S. federal government or knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim to the U.S. federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes “any request or demand” for money or property presented to the U.S. government. In addition, manufacturers can be held liable under the FCA even when they do not submit claims directly to government third-party payors if they are deemed to “cause” the submission of false or fraudulent claims. The FCA also permits a private individual acting as a “whistleblower” to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery. FCA liability is potentially significant in the healthcare industry because the statute provides for treble damages and mandatory penalties per false claim or statement. Government enforcement agencies and private whistleblowers have investigated pharmaceutical companies for or asserted liability under the FCA for a variety of alleged promotional and marketing activities, such as providing free product to customers with the expectation that the customers would bill federal programs for the product; providing consulting fees and other benefits to physicians to induce them to prescribe products; engaging in promotion for “off-label” uses; and submitting inflated best price information to the Medicaid Rebate Program.

HIPAA prohibits, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services.

The Physician Payments Sunshine Act, enacted as part of PPACA, imposes, among other things, annual reporting requirements for covered manufacturers for certain payments and “transfers of value” provided to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members.

HIPAA, as amended by HITECH, and their respective implementing regulations, impose, among other things, specified requirements relating to the privacy, security and transmission of individually identifiable health information held by covered entities, which include certain healthcare providers, health plans and healthcare clearinghouses, and their business associates, which include individuals or entities that perform services for covered entities that involve the creation, use, maintenance or disclosure of, individually identifiable health information. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in U.S. federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Many U.S. states and other foreign jurisdictions have analogous laws and regulations, such as state anti-kickback and false claims laws, that may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers. In addition, certain states require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures and certain states and local jurisdictions require the registration of pharmaceutical sales representatives.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws. For example, recent health care reform legislation, has among other things, amended the intent requirement of the U.S. Anti-Kickback Statute and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. Moreover, recent health care reform legislation provides that the government may assert that a claim including items or services resulting from a violation of the U.S. Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA.

Ensuring that our business arrangements with third parties comply with applicable healthcare laws and regulations will likely be costly. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations were found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, possible exclusion from government funded healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and curtailment of our operations, any of which could substantially disrupt our operations. If the physicians or other providers or entities with whom we expect to do business are found not to be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

We are subject to U.S. and foreign anti-corruption and anti-money laundering laws with respect to our operations and non-compliance with such laws can subject us to criminal and/or civil liability and harm our business.

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and possibly other state and national anti-bribery and anti-money laundering laws in countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, third-party intermediaries, joint venture partners and collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector. We engage third party investigators, CROs, and other consultants to design and perform preclinical studies of our product candidates, and will do the same for any clinical trials. Also, once a product candidate has been approved and commercialized, we may engage third party intermediaries to promote and sell our products abroad and/or to obtain necessary permits, licenses, and other regulatory approvals. We or our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities. We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, collaborators, partners, and agents, even if we do not explicitly authorize or have actual knowledge of such activities.

Noncompliance with anti-corruption and anti-money laundering laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension and/or debarment from contracting with certain persons, the loss of export privileges, reputational harm, adverse media coverage, and other collateral consequences. If any subpoenas, investigations, or other enforcement actions are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations and financial condition could be materially harmed. In addition, responding to any action will likely result in a materially significant diversion of management's attention and resources and significant defense and compliance costs and other professional fees. In certain cases, enforcement authorities may even cause us to appoint an independent compliance monitor which can result in added costs and administrative burdens.

The incidence and prevalence for target patient populations of our product candidates are based on estimates and third-party sources. If the market opportunities for our product candidates are smaller than we estimate or if any approval that we obtain is based on a narrower definition of the patient population, our revenue and ability to achieve profitability might be materially and adversely affected.

Periodically, we make estimates regarding the incidence and prevalence of target patient populations for particular diseases based on various third-party sources and internally generated analysis and use such estimates in making decisions regarding our drug development strategy, including acquiring or in-licensing product candidates and determining indications on which to focus in preclinical or clinical trials.

These estimates may be inaccurate or based on imprecise data. For example, the total addressable market opportunity will depend on, among other things, acceptance of our drugs by the medical community and patient access, drug pricing and reimbursement. The number of patients in the addressable markets may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our drugs, or new patients may become increasingly difficult to identify or gain access to, all of which may significantly harm our business, financial condition, results of operations and prospects.

Risks Related to our ADSs

The price of our ADSs may be volatile and may fluctuate due to factors beyond our control.

The trading market for publicly traded emerging biopharmaceutical and drug discovery and development companies has been highly volatile and is likely to remain highly volatile in the future. The market price of our ADSs may fluctuate significantly due to a variety of factors, including:

- positive or negative results from, or delays in, testing and clinical trials by us, collaborators or competitors;
- technological innovations or commercial product introductions by us or competitors;
- changes in government regulations;
- changes in the structure of healthcare payment systems;
- developments concerning proprietary rights, including patents and litigation matters;
- public concern relating to the commercial value or safety of our product candidates;
- financing, collaborations or other corporate transactions;
- publication of research reports or comments by securities or industry analysts;
- general market conditions in the pharmaceutical industry or in the economy as a whole;
- the loss of any of our key scientific or senior management personnel;
- the perceived values of our ordinary shares trading on the TPEX and our ADSs trading on Nasdaq relative to one another;
- sales of our ADSs or ordinary shares by us, our senior management and board members or holders of our ADSs or our ordinary shares in the future; or
- other events and factors, many of which are beyond our control.

These and other market and industry factors may cause the market price and demand for our ADSs to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from readily selling their ADSs and may otherwise negatively affect the liquidity of our ADSs. In addition, the stock market in general, and biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. In the past, when the market price of a security has been volatile, holders of that security have sometimes instituted securities class action litigation against the issuer. If any of the holders of our ADSs were to bring such a lawsuit against us, we could incur substantial costs defending the lawsuit and the attention of our senior management would be diverted from the operation of our business. Any adverse determination in litigation could also subject us to significant liabilities.

Restrictions on the ability to deposit our ordinary shares into our American depositary receipt facility may adversely affect the liquidity of our ADSs.

The ability to deposit our ordinary shares into our American depositary receipt facility for the issuance of ADSs is restricted by Republic of China, or ROC, law, which may adversely affect the liquidity of our ADSs. Under current ROC law and the Deposit Agreement, no person or entity, including the holders of ADSs and us, may deposit our ordinary shares in our American depositary receipt facility for the issuance of ADRs without specific approval of the Financial Supervisory Commission, or FSC, unless:

- (i) we pay stock dividends on, or make a free distribution of, our ordinary shares;
- (ii) the ADS holder exercises pre-emptive rights in the event of capital increases for cash; or
- (iii) investors purchase our ordinary shares, directly or through the depositary, on the TPEX, and deliver our ordinary shares to the custodian for deposit into our American depositary receipt facility, or our existing shareholders deliver our ordinary shares to the custodian for deposit into our American depositary receipt facility.

With respect to (iii) above, the depositary may issue ADSs against the deposit of those shares only if the total number of ADSs outstanding following the deposit will not exceed the number of ADSs previously approved by the FSC, plus any ADSs issued pursuant to the events described in items (i) and (ii) above. Issuance of additional ADSs under item (iii) above will be permitted to the extent that a corresponding number of previous ADSs have been cancelled.

The price of our ADSs may be limited by the trading price of our ordinary shares on the TPEX.

Our ordinary shares have been listed on the TPEX since June 1, 2017 under the code “6497.” From May 4, 2018 through April 22, 2019, the closing price of our ordinary shares on the TPEX ranged from NT\$20.25 per share to NT\$49.85 per share (which would be approximately \$0.66 per share to \$1.62 per share, based on the exchange rate in effect as of April 22, 2019). During the same period, the closing price of our ADSs on The Nasdaq Global Market ranged from \$2.86 per ADS to \$10.24 per ADS. The TPEX sets certain limitations on the trading volatility of our ordinary shares and there is currently a ten percent limit on the daily price movement on the TPEX. As a result of these limitations, the potential increase in trading price of any ADSs may be materially limited based on the perceived value of our ordinary shares on the TPEX. Similarly, decreases in the trading price of our ordinary shares on the TPEX due to the perceptions of investors in that market, which may be different from your own, may impact the value of your investment.

The cross listing of our ordinary shares and our ADSs may adversely affect the liquidity and value of our ADSs.

The cross listing of our ordinary shares and our ADSs may dilute the liquidity of these securities in one or both markets and may adversely affect the development of an active trading market for our ADSs in the United States. The price of our ADSs could also be adversely affected by trading in our ordinary shares on the TPEX. In addition, currency fluctuations as between the New Taiwan dollar and U.S. dollar may have an adverse impact on the value of our ADSs.

We have incurred and will incur increased costs as a result of operating as a public company in the United States, and our senior management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

Our ADSs began trading on The Nasdaq Global Market on May 4, 2018 under the trading symbol “ASLN”. As a U.S. public company, we have incurred significant legal, accounting and other expenses that we did not incur previously, and we will incur additional expenses after we no longer qualify as an “emerging growth company,” or EGC. The Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The Nasdaq Stock Market LLC, or Nasdaq, and other applicable securities rules and regulations impose various requirements on non-U.S. reporting public companies, including the establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our senior management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, which in turn could make it more difficult for us to attract and retain qualified senior management personnel or members for our board of directors.

However, these rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, we will be required to furnish a report by our senior management on our internal control over financial reporting and an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, while we remain an EGC we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants, adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented, and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Section 404. If we identify one or more material weaknesses, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

You may face difficulties in protecting your interests, and your ability to protect your rights through U.S. courts may be limited, because we are incorporated under Cayman Islands law, we conduct substantially all of our operations and all of our directors and executive officers reside outside of the United States.

We are an exempted company incorporated under the laws of the Cayman Islands. Our corporate affairs are governed by our Sixth Amended and Restated Memorandum and Articles of Association, or our Articles, the Companies Law (2018 Revision) of the Cayman Islands and the common law of the Cayman Islands. The rights of shareholders to take action against the directors, actions by minority shareholders and the fiduciary duties of our directors to us under Cayman Islands law are to a large extent governed by

the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from the common law of England and Wales, the decisions of whose courts are of persuasive authority, but are not binding, on a court in the Cayman Islands. Similarly, the rights of our shareholders and the fiduciary duties of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedent in some jurisdictions in the United States. In particular, the Cayman Islands has a less developed body of securities laws than the United States, and some U.S. states, such as Delaware, have more fully developed and judicially interpreted bodies of corporate law than the Cayman Islands. In addition, Cayman Islands companies do not have standing to sue before the federal court of the United States.

Shareholders of Cayman Islands exempted companies like us have no general rights under Cayman Islands law to inspect corporate records or to obtain copies of lists of shareholders of these companies. Although our shareholders are permitted by our Articles to request access to our books and records, our directors have discretion under our Articles to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but are not obliged to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest.

Certain corporate governance practices in the Cayman Islands, which is our home country, differ significantly from requirements for companies incorporated in other jurisdictions such as the United States. To the extent we choose to follow home country practice with respect to corporate governance matters, our shareholders may be afforded less protection than they otherwise would under rules and regulations applicable to U.S. domestic issuers.

As a result of all of the above, our public shareholders may have more difficulty in protecting their interests in the face of actions taken by management, members of the board of directors or controlling shareholders than they would as public shareholders of a company incorporated in the United States. For a discussion of significant differences between the provisions of the Companies Law of the Cayman Islands and the laws applicable to companies incorporated in the United States and their shareholders, see “Item 10. Additional Information—B. Memorandum and articles of association—Material Differences in Corporate Law”

Future sales, or the possibility of future sales, of a substantial number of our ADSs or ordinary shares could adversely affect the price of our ADSs.

Future sales of a substantial number of our ADSs or ordinary shares, or the perception that such sales will occur, could cause a decline in the market price of our ADSs. If any of our large shareholders or members of our management team sell substantial amounts of our securities in the public markets, or the market perceives that such sales may occur, the market price of our ADSs and our ability to raise capital through an issue of equity securities in the future could be adversely affected.

We may sell additional equity or debt securities or enter into other financing arrangements to fund our operations, which may result in dilution to our shareholders and holders of our ADSs and impose restrictions on our business.

In order to raise additional funds to support our operations, we may sell additional equity or debt securities, which could adversely impact our existing shareholders and new investors, as well as our business. The sale of additional equity or debt securities, or a combination of both, would result in the issuance of additional shares capital and dilution to our shareholders and holders of our ADSs.

The incurrence of indebtedness would result in increased fixed payment obligations and could also result in certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. In the event that we enter into collaborations or licensing arrangements to raise capital, we may be required to accept unfavorable terms, including relinquishing or licensing to a third party on unfavorable terms our rights to technologies or product candidates that we otherwise would seek to develop or commercialize ourselves or potentially reserve for future potential arrangements when we might be able to achieve more favorable terms.

Because we do not anticipate paying any cash dividends on our ADSs or ordinary shares in the foreseeable future, capital appreciation, if any, will be your sole source of potential gains and you may never receive a return on your investment.

We have not paid cash dividends in the past on our ordinary shares. We intend to retain earnings, if any, for use in our business and do not anticipate paying any cash dividends in the foreseeable future. As a result, capital appreciation, if any, on our ADSs or ordinary shares will be your sole source of potential gains for the foreseeable future, and you will suffer a loss on your investment if you are unable to sell your ADSs or the underlying ordinary shares at or above the price you pay for our ADSs or ordinary shares. Investors seeking cash dividends should not purchase our ADSs.

Holders of our ADSs may not have the same voting rights as the holders of our ordinary shares and may not receive voting materials in time to be able to exercise their right to vote.

As a holder of our ADSs, you will only be able to exercise the voting rights with respect to the underlying ordinary shares in accordance with the provisions of the deposit agreement. Under the deposit agreement, you must vote by giving voting instructions to the depository. Upon receipt of your voting instructions, the depository will try to vote the underlying ordinary shares in accordance with these instructions. You will not be able to directly exercise your right to vote with respect to the underlying shares unless you withdraw the shares. When a general meeting is convened, you may not receive sufficient advance notice to withdraw the shares underlying your ADSs to allow you to vote with respect to any specific matter. After we notify the depository of the agenda for the shareholders' meeting, the depository will notify you of the upcoming vote and will arrange to deliver our voting materials to you once they are available. We have agreed to give the depository at least 30 days' prior notice of shareholder meetings. Nevertheless, we cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depository to vote your shares. In addition, the depository and its agents are not responsible for failing to carry out voting instructions or for their manner of carrying out your voting instructions. This means that you may not be able to exercise your right to vote and you may have no legal remedy if the shares underlying your ADSs are not voted as you requested.

Except in limited circumstances, the depositary for our ADSs will give us a discretionary proxy to vote our ordinary shares underlying your ADSs if you do not vote at shareholders' meetings, which could adversely affect your interests.

Under the deposit agreement for our ADSs, to the extent we have provided the depositary with at least 45 days' notice of a proposed meeting, if voting instructions are not timely received by the depositary from you, you shall be deemed to have instructed the depositary to give a discretionary proxy to a person designated by us to vote the shares represented by your ADSs as desired. However, no such instruction shall be deemed given and no discretionary proxy shall be given (a) if we inform the depositary in writing that (i) we do not wish such proxy to be given, (ii) substantial opposition exists with respect to any agenda item for which the proxy would be given or (iii) the agenda item in question, if approved, would materially or adversely affect the rights of holders of shares and (b) unless we have provided the depositary with an opinion of our counsel to the effect that (a) the granting of such discretionary proxy does not subject the depositary to any reporting obligations in the Cayman Islands or the ROC, or by the ROC FSC, or TPEX, (b) the granting of such proxy will not result in a violation of the laws, rules, regulations or permits of the Cayman Islands, the ROC, the ROC FSC or TPEX, (c) the voting arrangement and deemed instruction will be given effect under the laws, rules, regulations and permits of the Cayman Islands, the ROC, the ROC FSC and TPEX and (d) the granting of such proxy will not under any circumstances result in the depositary being treated as the beneficial owner of ADSs under the laws, rules, regulations or permits of the Cayman Islands, the ROC, the ROC FSC and TPEX.

The effect of this discretionary proxy is that, if you fail to give voting instructions to the depositary as to how to vote the ordinary shares underlying your ADSs at any particular shareholders' meeting, you cannot prevent our ordinary shares underlying your ADSs from being voted at that meeting, absent the situations described above, and it may make it more difficult for shareholders to influence our management. Holders of our ordinary shares are not subject to this discretionary proxy.

You may not be able to withdraw the underlying ordinary shares of our ADSs.

Pursuant to ROC law, an ADS holder who is a non-ROC person wishing to withdraw and hold deposited ordinary shares from the ADS facility is required to appoint an eligible agent in the ROC for filing tax returns and making tax payments, or a Tax Guarantor. Such Tax Guarantor will be required to meet the qualifications set by the Ministry of Finance of the ROC and will act as the guarantor of the withdrawing ADS holder's tax payment obligations. In addition, subject to certain limited exceptions, under current ROC law, repatriation of profits by a non-ROC withdrawing ADS holder is subject to the submission of evidence by the withdrawing ADS holder of the appointment of a Tax Guarantor to, and approval thereof by, the ROC tax authority and of tax clearance certificates or evidentiary documents issued by the Tax Guarantor. We cannot provide any assurances that a withdrawing ADS holder will be able to appoint and obtain approval from the tax authority in a timely manner or at all.

Pursuant to ROC law, an ADS holder who is not an ROC person or ROC entity wishing to present ADSs to the depositary for cancellation and withdrawal and holding of the Deposited Securities from the depositary receipt facility is required to register as a foreign investor with the Taiwan Stock Exchange, or TWSE, if the ADS holder has never been registered as foreign investor with the TWSE previously, for making investments in the ROC securities market prior to withdrawing and holding the underlying ordinary shares from the depositary receipts facility.

Additionally, pursuant to ROC law, such withdrawing ADS holder is required to appoint a local agent in the ROC to, on such ADS holder's behalf, open a securities trading account with prior approval granted by the TWSE with a local securities brokerage firm (with qualification set by the FSC) and a bank account, pay ROC taxes, remit funds, exercise shareholder rights and perform such other functions as the ADS holder may designate upon such withdrawal. In addition, such withdrawing ADS holder is also required to appoint a custodian bank and open a custodian account to hold the securities and cash in safekeeping, make confirmations, settle trades and report all relevant information. Without making such appointment and the opening of such custodian account, the withdrawing ADS holder would be unable to hold or subsequently sell the deposited ordinary shares withdrawn from the ADR facility on the TPEX. The laws of the ROC applicable to the withdrawal of the underlying ordinary shares may change from time to time. We cannot provide any assurances that current law will remain in effect or that future changes of ROC law will not adversely affect the ability of ADS holders to withdraw deposited ordinary shares.

Holders of our ADSs may not receive distributions on our ordinary shares in the form of ADSs or any value for them if it is illegal or impractical to make them available to holders of ADSs.

The depository for our ADSs has agreed to pay to holder of our ADSs the cash dividends or other distributions it or the custodian receives on our ordinary shares or other deposited securities after deducting its fees and expenses and certain taxes. Holders of our ADSs will receive these distributions in proportion to the number of our ordinary shares their ADSs represent. However, in accordance with the limitations set forth in the deposit agreement, it may be unlawful or impractical to make a distribution available to holders of ADSs. We have no obligation to take any other action to permit the distribution of our ADSs, ordinary shares, rights or anything else to holders of our ADSs. This means that holders of our ADSs may not receive the distributions we make on our ordinary shares or any value from them if it is unlawful or impractical to make them available to ADS holders. These restrictions may have a negative impact on the market value of our ADSs.

Holders of our ADSs may be subject to limitations on transfer of their ADSs.

ADSs are transferable on the books of the depository. However, the depository may close its transfer books at any time or from time to time when it deems expedient in connection with the performance of its duties. In addition, the depository may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depository are closed, or at any time if we or the depository deems it advisable to do so because of any requirement of law or of any government or governmental body, or under any provision of the deposit agreement, or for any other reason in accordance with the terms of the deposit agreement. The rights of our shareholders may differ from the rights typically offered to shareholders of a U.S. corporation.

Our corporate affairs are governed by our Articles and by the laws governing Cayman Islands corporations and companies engaging in drug development, marketing and sales businesses, as well as by the common law of the Cayman Islands. Certain rights and responsibilities of our shareholders, ADS holders and members of our board of directors under Cayman law are different from those that apply to a Delaware corporation. For example, Directors of Cayman Islands exempted companies are required to observe certain fiduciary duties. These duties are owed to the Cayman Islands company and include the duty to act in the best interests of the company and the shareholders as a whole. However, the fiduciary duties of a director of a Cayman Islands exempted company may not be the same as the fiduciary duty of a director of a U.S. corporation. In addition, controlling shareholders of U.S. corporations owe fiduciary duties to minority shareholders, while shareholders (including controlling shareholders) of Cayman Islands companies owe no fiduciary duties to either to the company or to other shareholders. Further, the

rights of our shareholders to bring shareholders' suits against us or our board of directors under Cayman Islands law are much more limited than those of shareholders of a U.S. corporation. For example, under Cayman Islands law, a shareholder who wishes to bring a claim against a director would generally need to obtain permission from the courts to bring a derivative action, in the name of the company, against the director. This is because the director of a Cayman Islands exempted company owes duties to the company and not to individual shareholders. As a result, our shareholders may have more difficulty protecting their rights in connection with actions taken by our directors than they would as shareholders of a U.S. corporation. In addition, minority shareholders in a Cayman Islands exempted company have more limited rights than minority shareholders in a U.S. corporation in relation to mergers and similar transactions that the company may carry out. For example, if a merger under the Companies Law involving a Cayman Islands exempted company is approved by the requisite majority of shareholders, a dissenting minority shareholder would have the right to be paid the fair value of their shares (which, if not agreed between the parties, will be determined by the Cayman Islands court) if they follow the required procedures, subject to certain exceptions. Such dissenter rights differ substantially from the appraisal rights, which would ordinarily be available to dissenting shareholders of Delaware corporations. Further, if a takeover offer is made to the shareholders of a Cayman Islands exempted company and accepted by holders of 90% of the shares affected, the offeror may require the holders of the remaining shares to transfer such shares on the terms of the offer. An objection can be made to the Grand Court of the Cayman Islands but this is unlikely to succeed in the case of an offer which has been so approved unless there is evidence of fraud, bad faith or collusion. A minority shareholder in this scenario would have no rights comparable to the appraisal rights which would generally be available to a dissenting shareholder of a U.S. corporation in similar circumstances. See the section of this Annual Report titled "Item 10. Additional Information—B. Memorandum and articles of association—Material Differences in Corporate Law" for a description of the principal differences between the provisions of Cayman law applicable to us and the U.S. Delaware General Corporate Law relating to shareholders' rights and protections.

We qualify as a foreign private issuer and, as a result, we are not subject to U.S. proxy rules and are subject to Exchange Act reporting obligations that permit less detailed and less frequent reporting than that of a U.S. domestic public company.

We report under the Exchange Act as a non-U.S. company with foreign private issuer status. Because we qualify as a foreign private issuer under the Exchange Act, we are exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic public companies, including (i) the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act; (ii) the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and (iii) the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on

Form 10-Q containing unaudited financial and other specified information, or current reports on Form 8-K upon the occurrence of specified significant events. In addition, our officers, directors and principal shareholders are exempt from the reporting and "short-swing" profit recovery provisions of Section 16 of the Exchange Act and the rules thereunder. Therefore, our shareholders may not know on a timely basis when our officers, directors and principal shareholders purchase or sell our ordinary shares or ADSs. In addition, foreign private issuers are not required to file their annual report on Form 20-F until the date that is four months after the end of each fiscal year, while U.S. domestic issuers that are accelerated filers are required to file their annual report on Form 10-K within 75 days after the end of each fiscal year. Foreign private issuers also are exempt from Regulation Fair Disclosure, aimed at preventing issuers from making selective disclosures of material information. As a result of the above, you may not have the same protections afforded to shareholders of companies that are not foreign private issuers.

As a foreign private issuer, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from Nasdaq corporate governance listing standards. These practices may afford less protection to shareholders than they would enjoy if we complied fully with corporate governance listing standards.

As a foreign private issuer, we are permitted to take advantage of certain provisions in the Nasdaq listing rules that allow us to follow ROC law for certain governance matters. Certain corporate governance practices in the ROC may differ significantly from corporate governance listing standards. When our ADSs are listed on The Nasdaq Global Market, we intend to continue to follow ROC corporate governance practices in lieu of certain corporate governance requirements of Nasdaq. See “Management—Foreign Private Issuer Exemption.” Therefore, our shareholders may be afforded less protection than they otherwise would have under corporate governance listing standards applicable to U.S. domestic issuers.

We may lose our foreign private issuer status in the future, which could result in significant additional costs and expenses.

As discussed above, we are a foreign private issuer, and therefore, we are not required to comply with all of the periodic disclosure and current reporting requirements of the Exchange Act. The determination of foreign private issuer status is made annually on the last business day of an issuer’s most recently completed second fiscal quarter. We would lose our foreign private issuer status if, for example, more than 50% of our ordinary shares are directly or indirectly held by residents of the United States and we fail to meet additional requirements necessary to maintain our foreign private issuer status. If we lose our foreign private issuer status on this date, we will be required to file with the SEC periodic reports and registration statements on U.S. domestic issuer forms, which are more detailed and extensive than the forms available to a foreign private issuer. We will also have to mandatorily comply with U.S. federal proxy requirements, and our officers, directors and principal shareholders will become subject to the short-swing profit disclosure and recovery provisions of Section 16 of the Exchange Act. In addition, we will lose our ability to rely upon exemptions from certain corporate governance requirements under the Nasdaq listing rules. As a U.S. listed public company that is not a foreign private issuer, we will incur significant additional legal, accounting and other expenses that we will not incur as a foreign private issuer, and accounting, reporting and other expenses in order to maintain a listing on a U.S. securities exchange. These rules and regulations could also make it more difficult for us to attract and retain qualified members of our board of directors and more expensive to procure director and officer liability insurance.

We are an EGC and we cannot be certain if the reduced reporting requirements applicable to “emerging growth companies” will make our ADSs less attractive to investors.

We are an EGC as defined in the JOBS Act. For as long as we continue to be an EGC, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not EGCs, including not being required to comply with the auditor attestation requirements of Section 404, exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We may take advantage of these exemptions until we are no longer an EGC. We could be an EGC until December 31, 2023, although circumstances could cause us to lose that status earlier, including if the aggregate market value of our ADSs and ordinary shares held by non-affiliates exceeds \$700 million as of the end of our second fiscal quarter before that time, in which case we would no longer be an EGC as of the following December 31st (the last day of our fiscal year). We cannot predict if investors will find our ADSs less attractive because we may rely on these exemptions. If some investors find our ADSs less attractive as a result, there may be a less active trading market for our ADSs and the price of our ADSs may be more volatile.

If we fail to maintain an effective system of internal controls over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, shareholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our ADSs.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404, or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inadequate internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our ADSs.

Management will be required to assess the effectiveness of our internal controls annually, starting with our Annual Report on Form 20-F for the year ended December 31, 2019. However, for as long as we are an EGC under the JOBS Act, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404. An independent assessment of the effectiveness of our internal controls could detect problems that our management's assessment might not. Undetected material weaknesses in our internal controls could lead to financial statement restatements requiring us to incur the expense of remediation and could also result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

If securities or industry analysts do not publish research, or publish inaccurate or unfavorable research, about our business, the price of our ADSs and our trading volume could decline.

The trading market for our ADSs depends in part on the research and reports that securities or industry analysts publish about us or our business. If no or too few securities or industry analysts provide coverage or if one or more of the analysts who cover us downgrade our ADSs or publish inaccurate or unfavorable research about our business, the price of our ADSs would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our ADSs could decrease, which might cause the price of our ADSs and trading volume to decline.

Our U.S. ADS Holders may suffer adverse tax consequences if we are characterized as a passive foreign investment company.

Generally, if for any taxable year (i) 75% or more of our gross income is passive income, or (ii) at least 50% of the average quarterly value of our assets are held for the production of, or produce, passive income, we would be characterized as a passive foreign investment company, or PFIC, for U.S. federal income tax purposes. For purposes of the above calculations, a non-U.S. corporation that directly or indirectly owns at least 25% by value of the shares of another corporation is treated as if it held its proportionate share of the assets of the other corporation and received directly its proportionate share of the income of the other corporation. Passive income generally includes dividends, interest, rents, royalties and capital gains. Based on estimates of our gross income and gross assets (including tangible assets and intangible assets based on the anticipated market value of our ordinary shares), and the nature of our business, we expect to be classified as a PFIC for the taxable year ending December 31, 2018 and for future taxable years. There can be no assurance, however, regarding our PFIC status for any taxable year.

If we are characterized as a PFIC, our U.S. shareholders may suffer adverse tax consequences, including having gains realized on the sale of our ordinary shares treated as ordinary income, rather than as capital gain, the loss of the preferential rate applicable to dividends received on our ordinary shares by individuals who are U.S. Holders (as defined in “Material Income Tax Considerations—Material U.S. Federal Income Tax Considerations for U.S. Holders”), and having interest charges apply to distributions by us and the proceeds of share sales and having to comply with certain reporting requirements. Certain elections exist that may alleviate some of the adverse consequences of PFIC status and would result in an alternative treatment (such as mark-to-market treatment) of our ordinary shares; however, we do not intend to provide the information necessary for U.S. holders to make qualified electing fund elections if we are classified as a PFIC.

Item 4. Information on the Company

A. History and development of the company.

ASLAN Pharmaceuticals Pte. Ltd. was incorporated in Singapore in April 2010 and ASLAN Pharmaceuticals Limited was incorporated in Cayman Islands in June 2014 as the listing vehicle for our initial public offering and listing on the TPEX. Our subsidiaries, ASLAN Pharmaceuticals Taiwan Limited, ASLAN Pharmaceuticals Australia Pty Ltd., ASLAN Pharmaceuticals Hong Kong Limited, ASLAN Pharmaceuticals (Shanghai) Co. Ltd. and ASLAN Pharmaceuticals (USA) Inc., were incorporated in the Republic of China, Australia, Hong Kong, China and the United States in November 2013, July 2014, July 2015, May 2016 and October 2018, respectively.

Our principal executive offices are located at 83 Clemenceau Avenue, #12-03 UE Square, Singapore 239920. Our telephone number at that address is +65 6222 4235. Our registered office in the Cayman Islands is at the offices of Intertrust Corporate Services (Cayman) Limited at 190 Elgin Avenue, George Town, Grand Cayman KY1-9005, Cayman Islands. Our agent for service of process in the United States is Cogency Global Inc. 10 East 40th Street 10th Floor, New York, New York 10016, +1 212 947 7200. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>. We also maintain a corporate website at www.aslanpharma.com. Information contained in, or that can be accessed through, our website is not a part of, and shall not be incorporated by reference into, this document. We have included our website address in this document solely as an inactive textual reference.

Since our inception in 2010, we have devoted substantially all of our resources to acquiring rights to, and developing our product candidates, including preclinical studies and clinical trials and providing general and administrative support for our operations. We have not generated any revenue from product sales and we do not currently have any products approved for commercialization. We have financed our operations through a combination of debt and equity financings and government grants.

Our actual capital expenditures for the years ended December 31, 2016, 2017 and 2018 amounted to \$374,425, \$291,432 and \$80,262 respectively. These capital expenditures primarily consisted of our continued investment in construction of additional facilities to support the development of our products and technologies. We expect our capital expenditures to increase in absolute terms in the near term as we continue to advance our research and development programs and grow our operations. We anticipate our capital expenditures in 2019 to be financed from the proceeds from our existing cash and cash equivalents, including the net proceeds from our initial public offering of American Depositary Shares on the Nasdaq Global Market.

B. Business overview.

We are a clinical-stage oncology and inflammatory disease focused biopharmaceutical company based in Singapore developing novel therapeutics for global markets. We target diseases that are both highly prevalent in Asia and orphan indications in the United States and Europe. Our Asia development platform is designed to enable us to accelerate the development of drugs to treat these diseases. Our portfolio is comprised of four product candidates which target: validated growth pathways applied to new patient segments; novel immune checkpoints; and novel cancer metabolic pathways.

Our lead program, *varlitinib*, is a reversible small molecule pan-HER inhibitor that targets the human epidermal growth factor receptors HER1, HER2 and HER4. *Varlitinib* is currently being studied in a global pivotal clinical trial for biliary tract cancer for which we expect to report topline data in the second half of 2019.

We focus on cancers, such as biliary tract cancer, that are orphan diseases in the United States and Europe for which there are few, if any, approved therapies. Although registration trials for orphan diseases may require fewer patients, recruitment for such trials in the United States and Europe is often challenging given the limited availability of suitable patients. Asia offers a unique opportunity to accelerate the development of novel therapies in diseases where either the cancers are more prevalent or the availability of suitable patients is greater.

- **The cancers are more prevalent.** As an example, there are approximately 12,600 new cases of biliary tract cancer every year in the United States. In Asia, the incidence of biliary tract cancer is approximately 200,000 new cases every year, of which up to 145,000 are in China. The higher incidence in Asia is believed to be driven by both genetic and environmental factors.
- **The availability of suitable patients is greater.** As an example, in acute myeloid leukemia, or AML, there are a large number of clinical trials in the United States and Europe competing for a relatively small patient population. By conducting clinical development primarily in Asia, we are able to access a larger population of patients more easily and cost-effectively, with fewer competing trials.

Our Product Candidates

The following table summarizes our product candidate pipeline:

Programs	Discovery	Preclinical	Phase 1	Phase 2	Pivotal	Key milestones
GLOBAL RIGHTS						
<i>Varlitinib</i> (ASLAN001) Pan-HER inhibitor	Biliary tract cancer (2 nd line)					<ul style="list-style-type: none"> • Topline data 2H 19
	Biliary tract cancer (1 st line)					
ASLAN003 DHODH inhibitor	AML					<ul style="list-style-type: none"> • Part 1 readout 1H 19
ASLAN004 IL-4/IL-13 Receptor inhibitor	Atopic dermatitis					<ul style="list-style-type: none"> • SAD completion 1H 19
	Asthma					

We hold global rights to all of our product candidates with the exception of *varlitinib* and ASLAN003, for both of which BioGenetics Co., Ltd., or BioGenetics, acquired certain rights for South Korea.

Our lead program, *varlitinib*, is a highly potent, oral, reversible small molecule pan-HER inhibitor. Targeting individual members of the human epidermal growth factor receptor, or HER, family is a well-validated approach to cancer treatment. In some cancers, HER1-selective or HER2-selective agents, such as Herceptin, appear to be effective for a large number of patients. However, in other cancers such as gastric cancer, only a small number of patients have tumors driven by a single receptor, such as HER2. We believe there are larger subsets of patients with cancers driven by a combination of HER1, HER2, HER3 and HER4. We have demonstrated that *varlitinib* has activity in biliary tract cancer, where HER family expression is known to be high, as well as in HER2-positive breast cancer and in subsets of colorectal cancer. Following discussions with the United States Food and Drug Administration, or U.S. FDA, and other regulators, we have initiated a global pivotal clinical trial of *varlitinib* for biliary tract cancer. We believe *varlitinib* has the potential to be the first targeted therapy approved for biliary tract cancer.

In addition to *varlitinib*, we have several other product candidates in development. We are developing ASLAN003, an inhibitor of human dihydroorotate dehydrogenase, or DHODH, in AML and are exploring development in other solid tumors where this mechanism has been shown to be relevant. ASLAN003 has the potential to induce differentiation in blast cells and our observed signs of clinical activity and tolerance leads us to believe that ASLAN003 could be applicable in a broad range of AML patients.

ASLAN004 is an IL-4/IL-13 receptor antibody, which we believe has the potential to be a best-in-class therapy for moderate-to-severe atopic dermatitis and asthma, due to greater selectivity in binding target cells via the IL-13 receptor. We have initiated a Phase 1 clinical trial investigating ASLAN004 as a therapeutic antibody for atopic dermatitis. The single ascending dose study is expected to be completed in the first half of 2019.

ASLAN005 is an antibody in preclinical development targeting *recepteur d'origine nantais*, or RON, an immune checkpoint inhibitor.

Our Product Candidates

Varlitinib (ASLAN001)

Varlitinib is a highly potent, oral, reversible, small molecule inhibitor of the human epidermal growth factor receptor, or HER, family of receptor tyrosine kinases, or RTKs. Approved drugs that selectively target HER1 (also known as EGFR) or HER2 have been effective in some patients. However, patients may relapse on or may not respond to these therapies because the growth of their cancers is driven by other HER family receptors.

Varlitinib targets multiple members of the HER family of receptors and therefore we believe it may be effective in a broader range of tumor types and effective in patients that have progressed on prior HER1-selective or HER2-selective therapies. Following guidance from the U.S. FDA, we initiated a randomized global pivotal clinical trial testing *varlitinib* in second-line biliary tract cancer. We expect to report topline data for this trial in the second half of 2019.

We licensed *varlitinib* from Array BioPharma Inc., or Array, in 2011 after successful completion of five Phase 1 clinical trials in a range of solid tumors, which showed activity in breast cancer. To date, we have completed four additional Phase 1b clinical trials and two Phase 2 clinical trials for this product candidate. Over 600 patients have been dosed with *varlitinib* as monotherapy or in combination with other agents. In these clinical trials, *varlitinib* was well-tolerated in Caucasian and Asian patients. *Varlitinib* has demonstrated activity in a range of tumor types including biliary tract, gastric, breast and colorectal cancer. In January 2018, we entered into a new license agreement with Array, which replaces and supersedes our previous collaboration and license agreement, pursuant to which we obtained an exclusive, worldwide license to develop, manufacture and commercialize *varlitinib* for all human and animal therapeutic, diagnostic and prophylactic uses.

We have obtained orphan drug designation from the U.S. FDA for *varlitinib* in gastric cancer and cholangiocarcinoma, which represents approximately 60% of biliary tract cancer cases. The IND for *varlitinib* in biliary tract cancer was originally submitted by Array in 2005 and subsequently inactivated in February 2012.

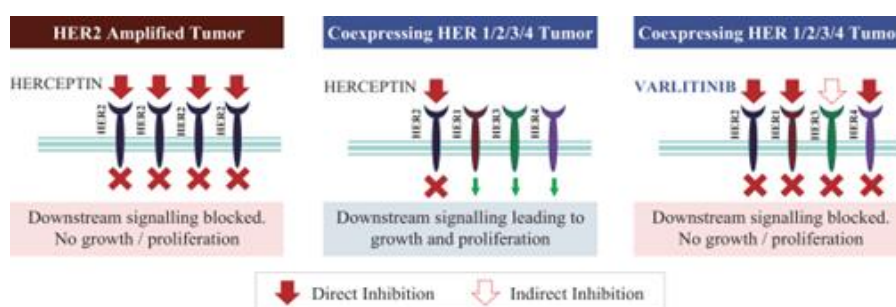
The IND for *varlitinib* in biliary tract cancer was then reactivated on April 21, 2017. We also have obtained orphan drug designation from the Ministry of Food and Drug Safety in South Korea for *varlitinib* in biliary tract cancer.

Mechanism of Action

Varlitinib targets the HER family of receptors, comprised of four members, HER1, HER2, HER3 and HER4, which is responsible for driving growth in human epithelial cells. These receptors can be mutated or overexpressed in many tumors, which can cause excessive proliferative activity and uncontrolled growth. For instance, HER2 is often overexpressed or amplified in breast cancer. Many of these tumors are dependent on continued HER2 activity for growth and are therefore sensitive to HER2 targeted agents such as Herceptin (*trastuzumab*). We believe that a pan-HER inhibitor such as *varlitinib*, which targets HER1, HER2 and HER4, could inhibit proliferation and control tumor growth. HER3 requires active HER1, HER2 or HER4 to function and therefore *varlitinib* indirectly inhibits HER3.

Varlitinib has been designed to have favorable properties with low nanomolar, or nM, potency for the HER family. *Varlitinib* selectively inhibits the HER family and therefore has the potential for fewer off-target effects. It was well-tolerated in the clinic, with reduced gastrointestinal, or GI, toxicity compared to other pan-HER inhibitors.

Varlitinib Mechanism of Action



As a reversible pan-HER inhibitor, *varlitinib* binds temporarily to the HER family of receptors when the drug concentration is high, but dissociates when the drug concentration falls. Irreversible pan-HER inhibitors bind permanently to the receptor so when they are absorbed in the GI tract, the receptors in the gut epithelium are irreversibly inhibited and prevented from proliferating, which may lead to high rates of diarrhea in patients. In contrast, the gut epithelium of patients taking a reversible inhibitor like *varlitinib* can proliferate when the local concentration in the gut falls between dosing, which should result in lower frequency and severity of diarrhea. Importantly, we believe the concentration of *varlitinib* in the tumor remains stable between dosing leading to sustained target inhibition predicted to be in excess of 90%.

Advantages

We believe that *varlitinib* has the potential to be the first targeted therapy approved for biliary tract cancer. We believe *varlitinib* has the following potential competitive advantages:

- **Potent inhibition of HER1, HER2 and HER4 potentially enables it to be used in a broader range of tumors than HER1-selective and HER2-selective agents.** Drugs such as Herceptin only target HER2, which is only effective in tumors driven specifically by HER2. We believe there are other patients whose tumors are driven by different combinations of HER1, HER2, HER3 and HER4, that may respond to pan-HER inhibitors.
- **HER4 inhibition may lead to a more durable response.** The upregulation of HER4 has been shown to act as an escape mechanism in breast cancer cell lines treated with *lapatinib*, which has no activity against HER4, leading to resistance. These cell lines remain sensitive to *varlitinib*, suggesting that *varlitinib* may lead to a more durable response. We believe that this response may also be seen in other tumor types.
- **Low levels of GI toxicity in comparison to other pan-HER inhibitors.** *Varlitinib* has demonstrated a low level of GI toxicity, which we believe is because it is a reversible inhibitor. Other pan-HER inhibitors are irreversible inhibitors and patients in those trials have exhibited as much as 40% grades 3/4 diarrhea. In contrast, across all *varlitinib* clinical trials as of December 31, 2018, only 3% of patients experienced grades 3/4 diarrhea.
- **Well-tolerated in conjunction with different chemotherapy regimens.** *Varlitinib* has been tested in combination with seven different chemotherapy regimens including doublet chemotherapy and doses have been established for all of these regimens. We believe this is important as chemotherapy protocols used for diseases like biliary tract cancer can vary from country to country.

Biliary Tract Cancer

Market Opportunity

Annually, there are approximately 200,000 new cases of biliary tract cancer in Asia, of which up to 145,000 are in China, and approximately 12,600 new cases in the United States. Biliary tract cancer has a five-year survival rate of less than 10% and there has been little improvement in prognosis or treatment outcomes over the last two decades.

Biliary tract cancer consists of intra-hepatic and extra-hepatic cholangiocarcinoma (cancer of the bile duct), cancer of the gall bladder and papilla of Vater (the final portion of the bile duct emptying into the small bowel). Though biliary tract cancer is considered to be a subset of liver cancer, therapies approved for liver cancer are not approved for biliary tract cancer. There are no therapies approved for biliary tract cancer in the United States.

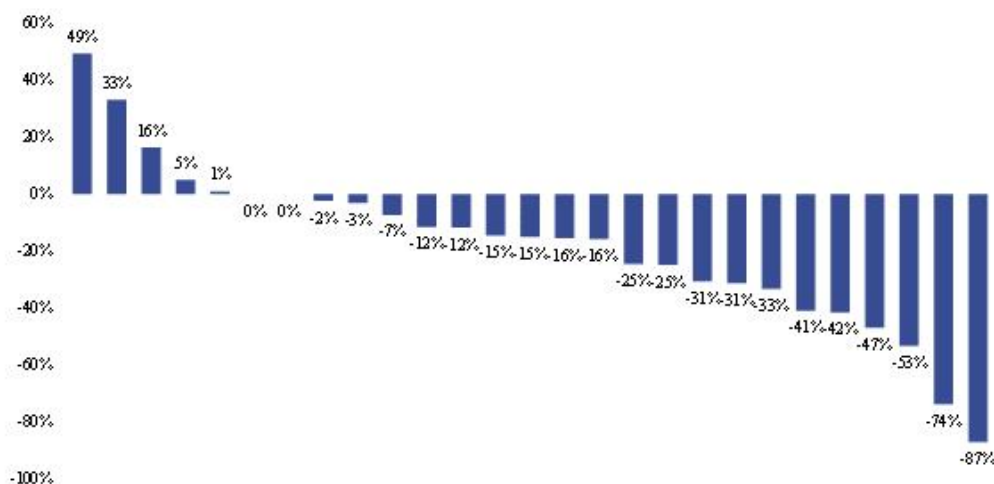
Approximately 35% of patients undergo surgical resection, but recurrence is common, with the disease returning in 50% to 60% of patients. Late-stage patients typically receive chemotherapy. In the first-line setting, the doublet combination of *gemcitabine* and *cisplatin* is commonly used and has demonstrated a response rate of 26% and overall survival of 11.7 months.

Specific pathways driving biliary tract cancer have not been identified, however recent data from Japan and China show that approximately 70% of biliary tract cancer tumors exhibit HER family overexpression, with HER4 expressed most widely.

Preclinical and Clinical Development

In a pooled analysis of biliary tract cancer patients from three Phase 1 clinical trials of *varlitinib* in combination with platinum-based regimens assessing efficacy and safety, 43 patients who have had up to four prior treatments have been enrolled as of the data cut-off date of November 26, 2018. Of the 27 patients evaluable for efficacy, 9 patients achieved a partial response (33%) and 13 patients had stable disease, corresponding to an ORR of 33% and disease control rate of 81%.

Maximum change in tumor size in biliary tract cancer patients from three Phase 1 clinical trials: *Varlitinib* in combination with platinum-based regimens



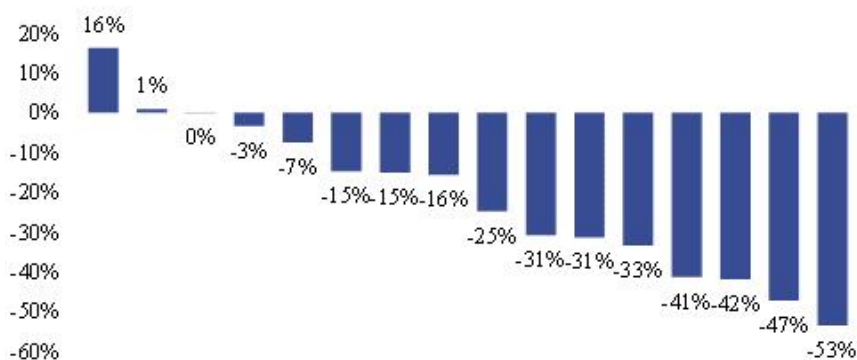
Ongoing Clinical Trials

First-Line Biliary Tract Cancer

We have initiated a Phase 1b clinical trial to test the safety, tolerability and efficacy of *varlitinib* in first-line biliary tract cancer in combination with *gemcitabine/cisplatin*. In the Phase 1b clinical trial, increasing doses of *varlitinib* are combined with *gemcitabine/cisplatin* to determine the maximum tolerated dose, or MTD, in first-line biliary tract cancer. When the MTD is declared, the clinical trial is expected to progress to Phase 2.

In the ongoing Phase 1b clinical trial, 21 biliary tract cancer patients who had not received prior systemic therapy had been enrolled as of the data cut-off date of November 26, 2018. Of the 16 patients evaluable for efficacy (11 in the 200mg cohort and five in the 300mg cohort), seven patients achieved a partial response and eight had stable disease greater or equal to 12 weeks, corresponding to an ORR of 44% and DCR of 94%. In the higher 300mg dose cohort, three of five patients achieved a partial response and two had stable disease greater or equal to 12 weeks, corresponding to a higher ORR of 60% and DCR of 100%. These preliminary results demonstrate increased activity of *varlitinib* in combination with *gemcitabine/cisplatin* compared to the commonly used doublet chemotherapy combination of *gemcitabine/cisplatin* alone, where ORR and DCR are 26% and 81%, respectively.

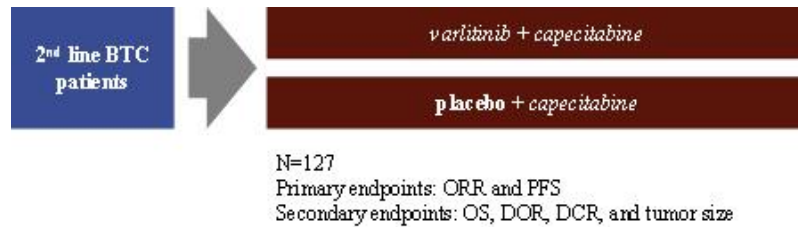
Maximum change in tumor size in first-line biliary tract cancer patients from Phase 1b clinical trials: *Varlitinib* in combination with *gemcitabine/cisplatin*



TREETOPP Trial in Second-Line Biliary Tract Cancer

Based on the results in biliary tract cancer from the Phase 1b clinical trials, we met with the U.S. FDA in October 2016 regarding the design of a registration trial and the overall development pathway for *varlitinib* in this indication. If this registration trial demonstrates a significant effect on overall response rate, *varlitinib* could be granted accelerated approval subject to a second confirmatory trial being run after approval to demonstrate an improvement in overall survival. TREETOPP is a randomized, double-blind, placebo-controlled clinical trial in second-line biliary tract cancer comparing *varlitinib* and *capecitabine* to placebo and *capecitabine*. This clinical trial is being led by Dr. Milind Javle at the MD Anderson Cancer Center. The co-primary endpoints are ORR and PFS and will be assessed by ICR according to RECIST. The secondary endpoints are OS, DOR, DCR and tumor size percentage change at week 12, as defined by RECIST. In order to maintain an overall one-sided 10% type I error rate for the trial, we plan to use a Hochberg procedure, meaning that the trial would be deemed to have met its primary objective if either endpoint is significant at the one-sided 5% level or if both endpoints are significant at the one-sided 10% significance level. We completed recruitment of 127 patients in December 2018 and expect to report topline data from this trial in the second half of 2019. If the endpoints are met, we intend to submit a New Drug Application, or NDA, to the U.S. FDA for accelerated approval in second-line biliary tract cancer.

Pivotal Biliary Tract Cancer Trial Design (ongoing)



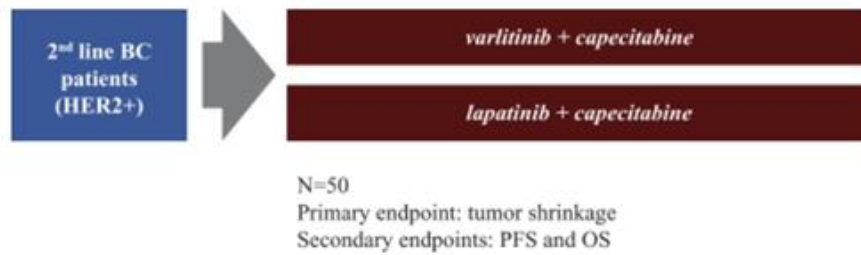
Metastatic Breast Cancer

The prevalence of breast cancer in Asia was approximately 2.3 million patients in 2012, while the prevalence in the United States was approximately 1.0 million, of which approximately 5% was metastatic in both cases.

Metastatic breast cancer has a five-year survival rate of 26%. Approximately 20% of these patients have tumors with HER2 amplification and will typically receive the anti-HER2 monoclonal antibody therapies Herceptin and *pertuzumab* in first-line treatment and then *ado-trastuzumab emtansine* in second-line treatment. In third-line treatment, patients receive the HER1/HER2 small molecule inhibitor *lapatinib* plus *capecitabine*. *Varlitinib* has demonstrated an improved objective response rate and with lower levels of diarrhea compared to *lapatinib* in a Phase 2 clinical trial.

We have completed a randomized open label Phase 2 clinical trial in HER2 amplified patients who have progressed on Herceptin. The open label clinical trial enrolled 50 patients with two arms comparing *varlitinib* and *capecitabine* to *lapatinib* and *capecitabine*, with a primary endpoint of tumor shrinkage at week 12, as assessed by ICR according to RECIST. Six patients withdrew consent within the first 30 days following enrollment, of which only one patient experienced a grade 4 serious adverse event, which was diarrhea and assessed as being drug-related. One patient died due to liver failure leading to multi-organ failure and sepsis after 11 days on treatment with *varlitinib* and *capecitabine* and was reported as “possibly related” to *varlitinib* because the immediate cause of the patient’s death could not be determined, and therefore, a relationship to *varlitinib* could not be excluded. These patients were excluded from the subsequent efficacy analysis. For the patients who remained in the clinical trial, the average tumor shrinkage in the *varlitinib* arm was 36% compared to 18% in the *lapatinib* arm, with $p=0.075$, which met the preset statistical criterion for significance for this clinical trial. (For reference, the U.S. FDA would typically require $p \leq 0.05$ to demonstrate statistical significance in a pivotal clinical trial.) The ORR was 60% for patients in the *varlitinib* arm compared to 46% for those in the *lapatinib* arm. *Varlitinib* and *capecitabine* was well-tolerated with 12.5% grades 3/4 diarrhea that was controlled on standard doses of *loperamide*. The incidence of diarrhea observed in the *varlitinib* and *capecitabine* arm also compared favorably to an observed incidence of 40% grades 3/4 diarrhea in published data for *neratinib*, an irreversible pan-HER inhibitor. In addition, the 60% ORR seen with *varlitinib* and *capecitabine* is comparable to the 64% ORR seen in *neratinib* studies. We also have ongoing investigator-led clinical trials in neoadjuvant breast cancer and breast cancer with brain metastasis.

Phase 2 Metastatic Breast Cancer Trial Design (completed)



Safety

Varlitinib has been dosed as monotherapy and in combination with singlet and doublet chemotherapies commonly used in biliary tract, gastric, metastatic breast and colorectal cancer. The maximum tolerated doses varied from 300mg twice daily to 500mg twice daily (BID).

Varlitinib Maximum Tolerated Dose in Phase 1/1b Clinical Trials

Regimen	MTD	Target indications
Monotherapy	500mg BID	-
Combination		
<i>Docetaxel</i>	500mg BID	Second-line gastric cancer
<i>Capecitabine</i>	400mg BID	Second-line biliary tract cancer, third-line metastatic breast cancer
FOLFOX	300mg BID	First-line gastric cancer
XELOX	300mg BID	First-line gastric cancer
<i>Cisplatin / 5-FU</i>	300mg BID	First-line gastric cancer
<i>Cisplatin / capecitabine</i>	300mg BID	First-line gastric cancer
<i>Gemcitabine / cisplatin</i>	Ongoing	First-line biliary tract cancer

Across all *varlitinib* clinical trials, the most commonly occurring drug-related adverse events, or AEs, as of December 31, 2018 were nausea (36% of patients with any grade, 1% with grade 3 or 4), diarrhea (32% of patients with any grade, 3% with grade 3 or 4) and fatigue (32% of patients with any grade, 4% with grade 3 or 4). Grade refers to the severity of the AE, with grade 3 indicating a severe or medically significant but not immediately life-threatening AE and grade 4 indicating an AE with potentially life-threatening consequences.

ASLAN003

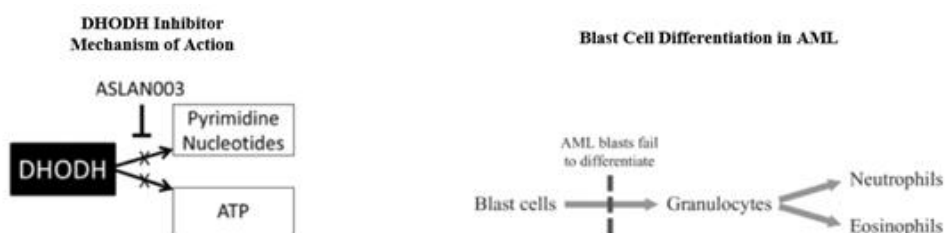
ASLAN003 is an orally active, potent inhibitor of DHODH that has the potential to be first-in-class in AML. AML is a cancer of the myeloid line of blood cells, characterized primarily by the rapid growth of abnormal white blood cells that build up in the bone marrow and interfere with the production of normal blood cells. We are conducting a Phase 2 clinical trial to develop ASLAN003 in AML. We reported interim data from the first 14 patients in December 2018 and we expect to report data from the dose optimization portion in the first half of 2019. Our plan is to meet with regulatory authorities to discuss expedited regulatory strategies, such as accelerated approval. We are also exploring other solid and liquid

tumor types where DHODH may be relevant, such as myelodysplastic syndrome, TNBC and HCC. We licensed ASLAN003 from Almirall in 2012 after Almirall's completion of a Phase 1 single ascending dose clinical trial, in which the drug was well-tolerated in healthy volunteers. We then conducted two additional Phase 1 clinical trials, exploring multiple ascending doses and fed/fasted comparison in healthy volunteers. These trials demonstrated that the drug was well-tolerated and plasma concentrations following dosing were similar in Caucasians and Asians. In August 2018, we obtained orphan drug designation from the U.S. FDA for ASLAN003 in AML.

Mechanism of Action

In cancer, increased levels of adenosine triphosphate, or ATP, and pyrimidines are required for tumor growth and survival. ASLAN003 is an inhibitor of DHODH, which is the enzyme controlling the rate limiting step in the *de novo* synthesis of pyrimidines. Pyrimidines are nucleotides and are essential building blocks for the production of DNA and RNA in mammalian cells. DHODH is located in the mitochondria and during manufacture of nucleotides it also contributes to the production of ATP. Inhibition of DHODH depletes the intracellular pool of pyrimidines and contributes to lower levels of ATP. This leads to the induction of the tumor suppressor p53, which at high levels of induction triggers apoptosis, or programmed cell death.

In AML, blast cells are unable to differentiate and form granulocytes, such as neutrophils and eosinophils, causing depletion of white blood cells. All-trans retinoic acid, or ATRA, which is approved to treat certain types of AML representing up to 15% of all AML patients, is able to differentiate these AML blast cells. Over 90% of patients with these types of AML experience a complete response and have a five-year survival of 75% when treated with ATRA. In other subsets of AML, DHODH inhibitors have been shown to promote differentiation of these blast cells *in vitro*, allowing them to turn into granulocytes, which potentially may reverse the condition.



Teriflunomide and *leflunomide*, which is a prodrug of *teriflunomide*, are first generation DHODH inhibitors, approved in the United States, Europe and Asia for the treatment of rheumatoid arthritis and multiple sclerosis, respectively. These molecules are less potent inhibitors of DHODH as compared to ASLAN003 and are sufficient to slow the proliferation of inflammatory cells and therefore adequate in chronic inflammatory disorders. However, these molecules have limited use in oncology because the inhibition of tumor growth requires more potent and sustained inhibition of DHODH. Previous efforts to develop high potency DHODH inhibitors for oncology indications were unsuccessful. Candidate drugs had unacceptable levels of toxicity due to off-target binding and would accumulate in the body, requiring up to two years to clear below pharmacologically active levels after dosing was stopped. As a result, development of these inhibitors did not progress. In contrast, ASLAN003 is not chemically related to first generation DHODH inhibitors. ASLAN003 is up to two orders of magnitude more potent at inhibiting DHODH than *leflunomide* and *teriflunomide*, and has a half-life of 18 hours, which should allow once daily dosing. We assessed the potency of ASLAN003 using three standard assays: cell free, human primary cell and human whole blood. The table below shows that ASLAN003 is more potent than *teriflunomide*. The IC₅₀ value is the concentration of the drug required to produce 50% inhibition of response in the assay.

ASLAN003 Cellular and Biochemical Potency

Assay	ASLAN003 (IC ₅₀ μM)	Teriflunomide (IC ₅₀ μM)
Cell free	0.035	1.1
Human primary cell	1.4	46
Human whole blood	2.5	259

Advantages

We believe that ASLAN003 has the potential to be a first-in-class DHODH inhibitor in oncology due to the following competitive advantages:

- **Potent inhibition of DHODH.** The binding affinity of ASLAN003 to DHODH is up to two orders of magnitude stronger than first generation DHODH inhibitors, such as *leflunomide* and *teriflunomide*. This highly specific and potent inhibition of human DHODH has the potential to reach the levels required to be efficacious in oncology.
- **Lack of toxicities associated with first generation inhibitors and other novel AML therapies.** Existing DHODH inhibitors, such as *leflunomide* and *teriflunomide*, are associated with significant liver toxicity. Both of these drugs take between three and four weeks to build to therapeutic levels and two years to clear completely after dosing is stopped. In contrast, ASLAN003 reaches full exposure in 24 hours with a half-life of 18 hours allowing rapid clearance following cessation of treatment. Furthermore, recently launched AML therapies, such as *midostaurin* and *enasidenib*, are associated with significant hematological and liver toxicities. Many AML patients are elderly or cannot otherwise tolerate significant toxicities. As a result, we believe the safety profile of ASLAN003 could allow its use in these patients.
- **Enables AML blast cells to differentiate into granulocytes and may be applicable in a broad range of AML patients.** ASLAN003 has demonstrated the ability to differentiate AML blast cells into granulocytes in a variety of AML cell lines that do not respond to ATRA. ASLAN003 may have applicability in patients that do not respond to ATRA, which represent approximately 85% of AML patients.
- **Evidence of activity in TNBC.** Recent data suggest that DHODH inhibition is active in animal models of TNBC, an aggressive type of breast cancer with few effective treatment options.

Market Opportunity

AML patients that have failed on standard of care chemotherapy in AML or do not respond to chemotherapy are termed relapsed/refractory, and represent the majority of the total AML population. In 2016, the annual incidence of relapsed/refractory patients is approximately 13,000 patients in the United States, 8,000 in Europe, 5,000 in Japan and 24,000 in China. Survival is age-dependent and survival rates are extremely poor for the elderly. The five-year relative survival rate for AML patients aged 19 years and below is 65%, but declines to 50% for patients aged 20 to 49 years, and the survival rate for patients aged 65 years or older is only 6%.

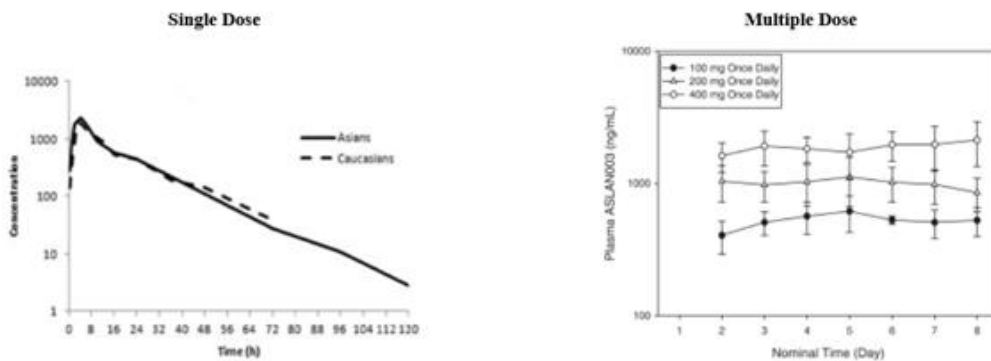
The first-line treatment for patients with AML is a combination of aggressive chemotherapies. However, elderly patients with AML typically are ineligible for aggressive treatment regimens due to the significant toxicity associated with these therapies. The survival of these patients is usually less than one year. Over the past two decades, many compounds have been evaluated in AML patients, however, only three targeted drugs have been approved. Furthermore, these drugs target relatively small subsets of patients, leaving a significant unmet need.

Preclinical and Clinical Development

Our Phase 1 single and multiple ascending dose clinical trials of ASLAN003, which were conducted with 95 healthy subjects, demonstrated dose proportional pharmacokinetics and no accumulation in the body. The exposure profile of the drug was highly similar in Asian and Caucasian subjects, and demonstrated stable drug levels in plasma at multiple doses.

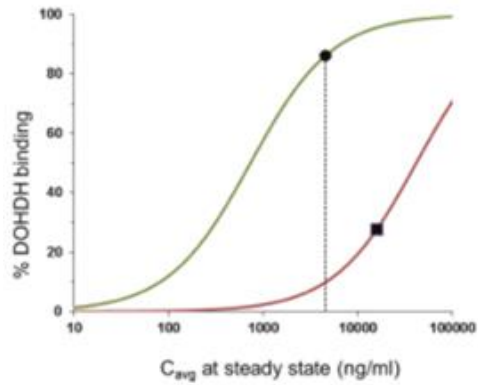
After a single 100mg oral dose of ASLAN003, the plasma levels of the drug in Caucasians and Asians were highly similar. ASLAN003 also reached steady state after the second day of dosing and did not accumulate in the body.

ASLAN003 Pharmacokinetic Profile



We predict the exposure of ASLAN003 to result in approximately 90% inhibition of DHODH, with 400mg taken once daily, in comparison to the maximum dose of *teriflunomide*, which leads to only 30% inhibition, as shown in the graph below:

DHODH Binding with ASLAN003 Compared to Teriflunomide



ASLAN003 in AML

In AML, cancerous blast cells fail to differentiate into mature blood cells and do not follow normal processes controlling cell death due to genetic mutations. As a result, the number of blast cells increases to very high levels, crowding out normal red and white blood cell production in the bone marrow, which can eventually result in patient death. Normal differentiated blast cells express specific cell surface markers, such as CD11b, and contain granules, which are active compartments inside the cell that store molecules for killing invading pathogens.

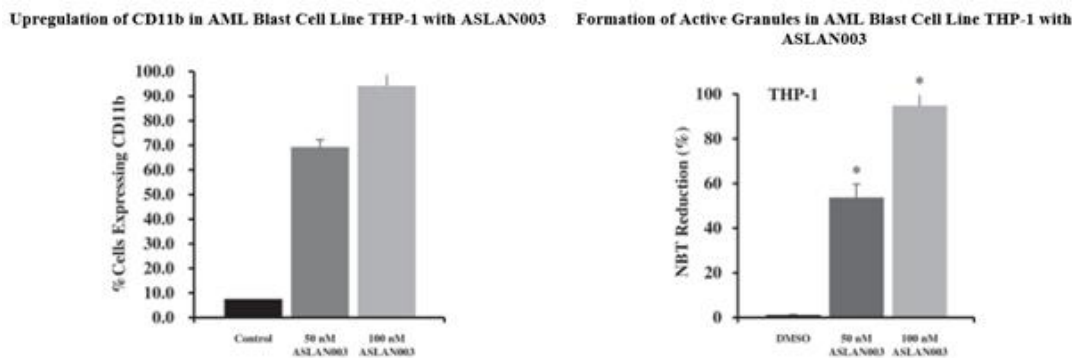
ASLAN003 has demonstrated the ability to cause differentiation of AML blast cells leading to mature cells that correctly express CD11b and contain active granules.

Data published in 2016 identified inhibition of DHODH as a key mechanism that can trigger differentiation of blast cells in AML. Inhibition of DHODH and the resultant depletion of the pyrimidine pool in AML resulted in extensive differentiation in *in vitro* and *in vivo* mouse bone marrow transplant models. In preclinical studies, we have demonstrated that ASLAN003 can differentiate AML blast cells *in vitro* and *in vivo* in a variety of AML cell lines and primary AML cells.

Differentiation of AML Cell Lines with ASLAN003

The human AML blast cell line, THP-1, demonstrated differentiation when exposed to low doses of ASLAN003 characterized by expression of cell surface markers of normal immune cells, such as CD11b, condensation of the nuclei and formation of active granules that are indicative of normal human white blood cells. Low concentrations of ASLAN003, approximately equivalent to a 50mg once daily dose in patients, led to over 95% upregulation of CD11b which is indicative of differentiation of AML blast cells to granulocytes.

ASLAN003 exposure also resulted in blast cells developing condensed, lobed nuclei, characteristic of normal human granulocytes, and in the appearance of active granules in the cytoplasm, as demonstrated by the reduction of Nitro Blue Tetrazolium, or NBT, a standard assay for granulocytes, as shown below:



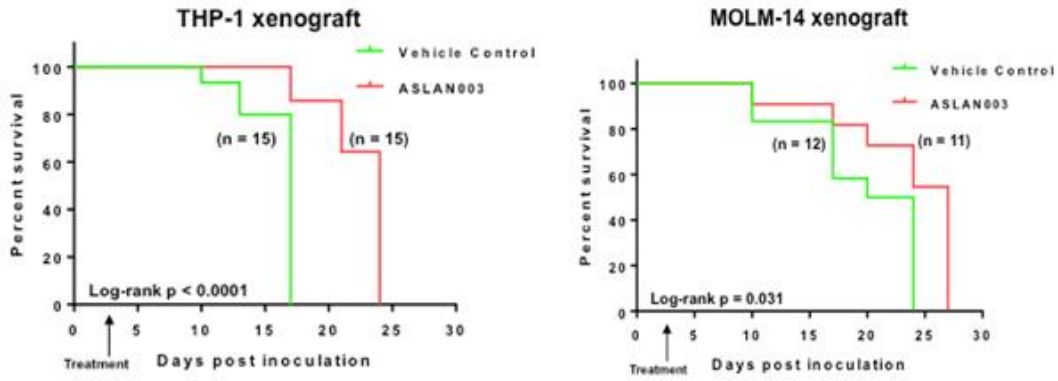
In addition to THP-1, the differentiation effect of ASLAN003 has also been demonstrated in other AML cell lines, namely KG-1 and MOLM-14 with similar nanomolar potency.

ASLAN003 *in vitro* differentiation activity

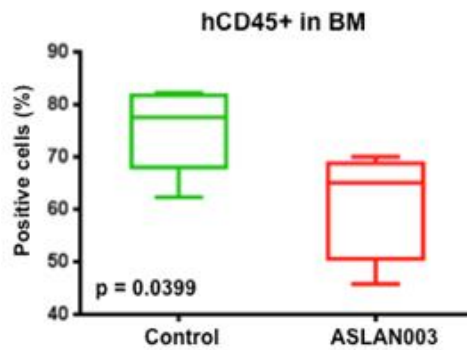
AML cell line	ED50 (nM) for differentiation
THP-1	28
KG-1	56
MOLM-14	85

We have also demonstrated that ASLAN003 reduces leukemic burden and prolongs survival *in vivo* in mice bearing AML cell lines THP-1 and MOLM-14. ASLAN003 also reduced leukemic burden in an AML PDX model.

Survival advantage of ASLAN003 *in vivo*



Reduction of leukemic burden in AML PDX model by ASLAN003



AML Phase 2 Clinical Trial

We have initiated a Phase 2 clinical trial with ASLAN003 in patients with advanced relapsed/refractory AML in Australia and Singapore. We intend to initially recruit 24 patients in the first part of this trial and test at least four doses of ASLAN003 (100mg QD, 200mg QD, 100mg BID and 200mg BID) in the AML population as monotherapy for 28 days or until progression with a primary endpoint of the rates of complete remission, or CR, and complete remission with incomplete bone marrow recovery, or CRi, followed by an expansion cohort of an additional 20 patients to study the optimum dose selected by the steering committee. In addition, we are planning an additional clinical trial recruiting up to 10 patients to explore the efficacy of ASLAN003 in combination with azacitidine.

Phase 2 AML Trial Design (ongoing)



As of November 16 2018, 14 patients with AML ineligible for standard treatment, including relapsed, refractory and treatment naïve patients, had been enrolled in the multicenter dose optimization study to evaluate ASLAN003 monotherapy administered as a 28-day cycle. Eight patients had received at least one post-treatment assessment at the cut-off date and were evaluable for efficacy. Of the eight evaluable patients, four patients showed clinical signs of efficacy: two patients exhibited evidence of myeloid differentiation; and, one patient in the 100mg BID cohort developed suspected differentiation syndrome. Overall, four patients had stable disease for more than three months. One AML patient that entered suspected differentiation syndrome demonstrated a reduction in peripheral blood blast cells from 66% to 6% with a concomitant increase in neutrophils. Despite this significant reduction in blood blast cells, we were unable to confirm whether this patient had a complete remission (which would require bone marrow blast cells to be 5% or less) because the patient had bone marrow fibrosis and it was therefore not possible to take a viable bone marrow biopsy.

Efficacy summary of ongoing ASLAN003 AML Phase 2 clinical trial

Cohort	100mg QD	200mg QD	100mg BID	Total
Patients treated	6	6	2	14
Patients evaluable for efficacy	2	5	1	8
Patients with signs of efficacy	1	3	0	4

As of March 2019, we have completed recruitment for the 100mg BID cohort (cohort 3) and continue to see further evidence of activity. Dosing for the 200mg BID cohort (cohort 4) has started and is expected to complete in the first half of 2019. In addition, we intend to open a cohort to explore the safety, tolerability and efficacy of ASLAN003 in combination with azacitidine. In December 2018, we submitted an IND to the U.S. FDA for ASLAN003 to allow the current Phase 2 clinical trial to open additional centers in the United States.

Potential Development Opportunity for ASLAN003 in Solid Tumors

Recent publications have demonstrated that phosphatase and tensin homolog (PTEN) (Mathur *et al.*, Cancer Discovery 2017) and KRAS (Koundinya *et al.*, Cell Chemical Biology 2018) mutant cancers are both highly sensitive to DHODH inhibition. Additional evidence suggests that DHODH inhibitors may have synergistic efficacy in TNBC in combination with commonly used chemotherapies (Brown *et al.*, Cancer Discovery 2017). We have reproduced this data, and our data in PTEN mutant TNBC PDX models with ASLAN003 confirms inhibition of DHODH leads to efficacy comparable to chemotherapy (doxorubicin). Finally, an upcoming publication demonstrates that tumorigenesis is dependent on *de novo* synthesis of pyrimidines via DHODH and that DHODH activity is conserved in multiple cancer types, therefore inhibition of DHODH can be efficacious in a wide variety of cancers (Bajzikova *et al.*, Cell Metabolism 2019).

Safety

ASLAN003 has been well-tolerated in AML patients treated to date with only two patients out of 14 experiencing a grade 3/4 adverse event. The most commonly occurring adverse events in AML were leukocytosis, nausea and rash, with grade 3/4 leukocytosis in one patient.

Adverse event	N=14			
	Any grade		Grade ≥ 3	
	N	(%)	N	(%)
Leukocytosis	2	14	1	7
Nausea	2	14	0	0
Rash maculo-papular	2	14	0	0
Pleural effusion	1	7	1	7
Abdominal pain	1	7	0	0
Fatigue	1	7	0	0
Conjunctivitis	1	7	0	0
Decreased appetite	1	7	0	0
Hypokalaemia	1	7	0	0
Epistaxis	1	7	0	0
Rash generalised	1	7	0	0

ASLAN004

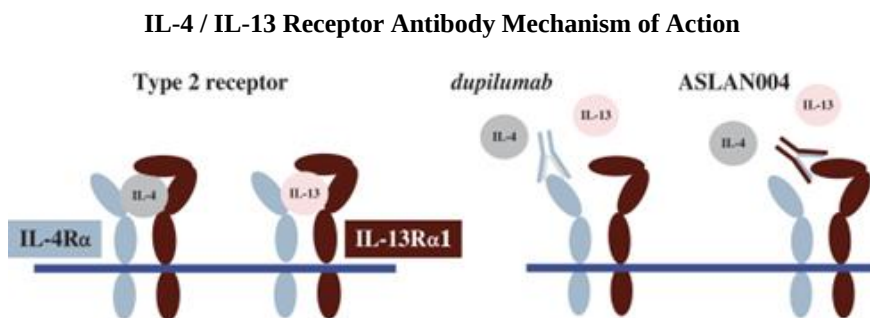
ASLAN004 is a fully human monoclonal antibody that targets the IL-13 receptor $\alpha 1$ subunit, or IL-13R $\alpha 1$. ASLAN004 is currently in preclinical development, and we are not aware of any other antibodies in clinical development targeting IL-13R $\alpha 1$. By targeting IL-13R $\alpha 1$, ASLAN004 potentially inhibits signaling of both interleukin 4, or IL-4, and interleukin 13, or IL-13. IL-4 and IL-13 are central to triggering symptoms of allergy in atopic dermatitis, such as redness and itching of the skin, as well as asthma symptoms such as shortness of breath, wheezing and coughing. *Dupilumab* is marketed for both moderate-to-severe atopic dermatitis and moderate-to-severe asthma. As we target the same pathways as

dupilumab, we believe ASLAN004 can follow a similar regulatory path. We believe ASLAN004 has the potential to become a first-in-class IL-13R α 1 inhibitor. By targeting IL-13R α 1, a receptor with a narrower cellular distribution than the IL-4 receptor, we believe ASLAN004 has the potential to offer a lower dosing frequency, which are important features for subcutaneous injections, providing greater patient convenience. In addition, ASLAN004 has more selective binding than *dupilumab*, which we believe could give ASLAN004 a more favorable side effect profile than *dupilumab*. We are conducting a Phase 1 clinical trial for ASLAN004 in atopic dermatitis. The single ascending dose portion of the study recruited healthy volunteers and the multiple ascending dose component will recruit moderate to severe atopic dermatitis patients. The single ascending dose study is expected to complete in the first half of 2019. In the future, we may also develop ASLAN004 in other inflammatory indications, such as chronic obstructive pulmonary disorder, or COPD. We licensed worldwide rights for ASLAN004 from CSL Limited, or CSL, in May 2014.

Mechanism of Action

ASLAN004 is a fully human monoclonal antibody with high affinity binding that inhibits both IL-4 and IL-13 signaling by binding to IL-13R α 1. The cytokines IL-4 and IL-13 are the main drivers of allergic inflammation and have mutually redundant functions. They selectively bind and stimulate the type 2 receptor, which is a complex composed of IL4R α and IL-13R α 1. Stimulation of the common receptor for IL-4 or IL-13 triggers a signaling cascade that can result in severe atopic dermatitis or asthma. The pivotal role for this pathway in these disease indications has been exemplified by the monoclonal antibody *dupilumab* which binds to IL-4R α to block signaling by IL-4 and IL-13. We are not aware of any other monoclonal antibody in development that can inhibit both IL-4 and IL-13 signaling. IL-13R α 1 has a narrower cellular distribution than IL-4R α . We believe this can offer potential benefits that include a lower dosing frequency than *dupilumab*, which requires subcutaneous injections every two weeks with a 2 milliliter injection volume. These potential benefits of ASLAN004 would represent meaningful advantages for patient treatment. An additional benefit of ASLAN004 is its lack of binding to the type 1 receptor, which is expressed on a broader range of hematological cell types. We believe that by avoiding inhibition of the type 1 receptor, ASLAN004 may have fewer side effects than *dupilumab*, which does bind the type 1 receptor.

The figure below demonstrates the binding of ASLAN004 and *dupilumab* to the type 2 receptor:



Advantages

We believe that ASLAN004 has the potential to be a best-in-class therapy:

- **Validated mechanism with the potential for greater efficacy than IL-13 selective and IL-4 selective inhibitors.** IL-13 selective and IL-4 selective inhibitors, such as *lebrikizumab*, have shown limited efficacy in treating allergic inflammation, with several agents recently failing to demonstrate efficacy in Phase 2 and Phase 3 clinical trials. We believe that agents that can block the activity of both IL-4 and IL-13 will be more efficacious. *Dupilumab* was shown to be effective in treating moderate-to-severe atopic dermatitis by blocking IL-4 and IL-13 activity. Similar to *dupilumab*, ASLAN004 also blocks the activity of IL-4 and IL-13.
- **Potential for less frequent dosing.** *Dupilumab* is dosed once every two weeks with a 2 milliliter subcutaneous injection. We may be able to offer a once monthly injection with ASLAN004. This potential reduced injection frequency would provide patients with greater convenience.
- **Potential for improved safety profile.** ASLAN004 targets the IL-13Ra1 subunit of the IL-4/IL-13 receptor, whereas *dupilumab* blocks IL-4Ra. As a result, both ASLAN004 and *dupilumab* block the type 2 receptor, which contains IL-4Ra and IL-13Ra1, however only *dupilumab* blocks the type 1 receptor, which contains IL-4Ra but not IL-13Ra1, and is present on B-cells and macrophages. We believe that by avoiding inhibition of the type 1 receptor, ASLAN004 may have fewer side effects.

Market Opportunity

Market Opportunity in Severe Atopic Dermatitis

Atopic dermatitis is the most common dermatological disease, affecting over 200 million patients worldwide, characterized by red inflamed skin and severe daytime and nighttime itching, which can severely impact patients' quality of life. Up to one-third of adult atopic dermatitis patients are considered moderate-to-severe, for which currently available therapeutics are limited and management is challenging in the majority of cases.

Treatment options have focused on topical therapies. In December 2016, the U.S. FDA granted approval for Eucrisa (developed by Pfizer Inc.), a topical treatment for mild to moderate atopic dermatitis. More recently in March 2017, the U.S. FDA granted approval for *dupilumab* (developed by Sanofi S.A. and Regeneron Pharmaceuticals, Inc.) for adults with moderate-to-severe atopic dermatitis.

Market Opportunity in Asthma

Asthma affects approximately 300 million patients worldwide. Chronic inflammation of the airway, combined with bronchial hyper-reactivity causes shortness of breath, wheezing and coughing, potentially leading to exacerbations that may result in hospitalization or death. Over 4.5 million severe asthmatics have symptoms which cannot be controlled with conventional therapies, such as bronchodilators or inhaled corticosteroids.

Xolair (anti-IgE) and Nucala (anti-IL5) are the two leading biological therapies by sales. Novel therapies like *dupilumab* are anticipated to compete with biological therapies and inhaled therapies.

Preclinical and Clinical Development

ASLAN004 is a fully human IgG4 monoclonal antibody that specifically binds to the human IL-13Ra1 protein and was originally made using the Medarex mouse technology. The antibody was isolated and optimized to have picomolar binding affinity by CSL Behring, a member of the CSL group of companies.

ASLAN004 is a potent inhibitor of both IL-4 and IL-13 signaling with a binding affinity in the picomolar range for human IL-13Ra1. In *in vitro* assays, ASLAN004 inhibits the release of mediators that trigger allergic reactions with an IC50 in the low nM range.

We have constructed manufacturing cell lines that deliver a yield of over two grams per liter of therapeutic antibody. ASLAN004 has been successfully manufactured at the 500-liter production scale in accordance with current good manufacturing practices, or cGMP. ASLAN004 has been tested in four-week good laboratory practices, or GLP, compliant toxicology studies in primates.

We initiated a Phase 1 dose escalation clinical trial for ASLAN004 and enrolled the first subject in October 2018. The single ascending dose (SAD) portion of the study will recruit healthy volunteers, and is followed by a multiple ascending dose (MAD) study conducted in moderate-to-severe atopic dermatitis patients. In the first part of the SAD study, we demonstrated that ASLAN004 was well-tolerated at all doses when administered to healthy volunteers intravenously. There were no adverse events that led to discontinuations. Analysis of downstream mediators including phosphorylation of STAT6 (pSTAT6), a critical mediator of allergic inflammation, demonstrated complete inhibition within one hour of dosing, which was then maintained for more than 29 days, suggesting monthly dosing may be achievable. In the second part of the ongoing SAD study, we are testing a subcutaneous formulation. We dosed the last patient in March 2019 and the SAD study is expected to complete in the first half of 2019. The MAD study will provide early efficacy data in severe atopic dermatitis, allowing dose selection and an early comparison to currently available standards of care.

Preclinical Pipeline

We have been building an immuno-oncology portfolio to provide a pipeline of innovative drug candidates that could be used as monotherapy or in combination with other drug candidates in our portfolio.

- **ASLAN005—an immuno-oncology target expressed on the macrophage, whose inhibition could enhance T-cell activity.** We have an ongoing collaboration with the Huntsman Institute in Utah studying the effects of RON inhibition. RON kinase activation may lead to the formation of macrophages with an M2 phenotype, which are tumor supportive. By inhibiting RON, the macrophage type 1 phenotype may be preferred and this phenotype is tumor suppressive, releasing cytokines that can potentially enhance the activity of T-cells. This may lead to synergistic activity when combined with PD1 or CTLA4 inhibitors. We have started development of a fully human monoclonal antibody against the extracellular domain of RON kinase.

Competition

Our industry is intensely competitive and subject to rapid and significant technological change. While we believe that our knowledge, experience and scientific resources provide us with competitive advantages, we face substantial competition from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. Many of our competitors have significantly greater financial, technical and human resources. Small and early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. As a result, our competitors may discover, develop, license or commercialize products before or more successfully than we do.

We face competition with respect to our current product candidates, and will face competition with respect to future product candidates, from segments of the pharmaceutical, biotechnology and other related sectors, as well as from academic institutions.

The acquisition or licensing of pharmaceutical products is also very competitive. If we seek to acquire or license products, we will face substantial competition from a number of more established companies, some of which have acknowledged strategies to license or acquire products and many of which are bigger than us and have more institutional experience and greater cash flows than we have. These more established companies may have competitive advantages over us, as may other emerging companies taking similar or different approaches to product licenses or acquisitions. In addition, a number of established research-based pharmaceutical and biotechnology companies may acquire products in late stages of development to augment their internal product lines, which may provide those companies with an even greater competitive advantage.

If our product candidates are approved, they may compete with currently marketed drugs and therapies used for treatment of the same indications, and potentially with drug candidates currently in development. The key competitive factors affecting the success of any approved product include its efficacy, safety profile, price, method of administration and level of promotional activity.

Varlitinib

- There are no approved targeted therapies for biliary tract cancer; however, there are several targeted therapies currently in clinical development targeting specific subsets of biliary tract cancer, including *ivosidenib* being developed by Agios Pharmaceuticals, Inc., ARQ087 being developed by Arqule, Inc. and *lenvatinib* being developed by Eisai Inc.

ASLAN003

- We do not consider chemotherapy to be a competitor as we expect ASLAN003 to be used either in patients that are not eligible for chemotherapy or in combination with chemotherapy.
- *Enasidenib* was recently approved to treat adults with AML whose tumors have mutations in IDH2, which represents around 10-15% of AML patients. In the single-arm registration study, 40% of patients responded to *enasidenib*; however, differentiation syndrome, which can be fatal if not treated, occurred in 14% of patients.
- *Midostaurin* was also recently approved to treat newly diagnosed AML patients with a FLT3 mutation, which represents around 30% of AML patients.
- There are a large number of drugs currently in development for AML. Most of these target specific subsets of disease.

ASLAN004

- We are not aware of any other drugs targeting IL-13R α 1 and we believe our intellectual property would preclude such development.
- *Dupilumab* from Sanofi S.A. and Regeneron Pharmaceuticals, Inc. is approved to treat both moderate-to-severe atopic dermatitis and moderate-to-severe asthma.
- There are several IL-13 selective inhibitors in development, including *lebrikizumab* being developed by Dermira, Inc., and *tralokinumab* being developed by AstraZeneca. Both of these drugs have recently failed in Phase 3 clinical trials in asthma, however they may be successful in other indications, such as atopic dermatitis.

Manufacturing

We do not have internal manufacturing capabilities for small molecules or biological drugs and we do not intend to build or acquire infrastructure for manufacturing our drugs for clinical or commercial supply. All of our clinical supplies are manufactured in accordance with cGMP using high quality contract manufacturing organizations based in the United States, Europe and Asia.

We are currently developing a validated commercial process for the manufacture of *varlitinib*. We have contracted with three cGMP compliant third-party manufacturers in the United Kingdom and China to manufacture the active pharmaceutical ingredient and final tablet. The first batches of *varlitinib* drug substance manufactured using the validated commercial process are expected to be available in mid-2019.

We have worked with one contract manufacturing organization to manufacture ASLAN004 at a 500 liter scale and are currently in the process of selecting a long term late-stage clinical commercial manufacturer for this drug.

Varlitinib

Varlitinib drug substance is manufactured in accordance with cGMP by Sterling Pharma Solutions Limited in the United Kingdom. We have manufactured at the 200kg scale and are currently in process validation at the 350kg scale. *Varlitinib* drug product (tablet) is manufactured in accordance with cGMP by PCI Pharma Services in the United Kingdom. Both drug substance and drug product can be scaled to over four tons per year. A second site manufacture for *varlitinib* in accordance with cGMP has been established at WuXi Apptec Co., Ltd., or WuXi, in China for both drug substance and drug product. Currently, WuXi has successfully manufactured at the 30kg scale.

ASLAN003

ASLAN003 drug substance has been manufactured by Sigma-Aldrich Company LTD in Switzerland at the 30kg scale in accordance with cGMP. ASLAN003 drug product in the form of capsules has been manufactured by WuXi in China in accordance with cGMP. We expect to develop an ASLAN003 tablet in 2019 and plan to conduct further scale up and process optimization of both drug substance and drug product.

ASLAN004

Manufacturing cell lines for ASLAN004 have been created by Selexis SA. Process development for ASLAN004 drug substance has been successful and was developed by JHL Biotech, Inc. Manufacture at 500 liter scale for both non-GMP (for toxicology) and cGMP compliant (for clinical trials) has been completed.

License and Collaboration Agreements

Collaboration and License Agreements with BioGenetics

License of varlitinib for South Korea

On February 27, 2019, we entered into a collaboration and license agreement with BioGenetics pursuant to which we granted BioGenetics the exclusive right to commercialize, and if agreed, manufacture, *varlitinib* for the treatment of all indications in South Korea. In consideration of the rights granted to BioGenetics under the agreement, we received an upfront payment of \$2 million from BioGenetics and are eligible to receive up to \$11 million in sales and development milestones (the threshold for the sales milestones being subsequently amended by the ASLAN003 license summarized below). We are also eligible to receive tiered double-digit royalties on net sales up to a percentage within the mid-twenties. BioGenetics will be responsible for obtaining initial and all subsequent regulatory approvals of *varlitinib* in South Korea. We may provide clinical drug supplies to BioGenetics required for regulatory filings and for commercialization of products, pursuant to a separate manufacturing and supply agreement which the parties shall use commercially reasonable efforts to enter into no later than June 30, 2020.

During the license period and for one year thereafter, neither BioGenetics, nor any of its affiliates, will participate in or fund, directly or indirectly, the development, manufacture or commercialization of a product which competes with *varlitinib*. The license period commences on the effective date of the agreement and, unless terminated earlier pursuant to the terms of the agreement, or is mutually agreed to be extended, expires on the tenth anniversary of first commercial sale, subject to a right of automatic renewal for a further year upon either party's notice. Either party may terminate the agreement in the event of material breach by, or insolvency of, the other party, or in the event of a material safety risk associated with the product. On any termination of the agreement, the license granted to BioGenetics will terminate, subject to certain transitional provisions.

License of ASLAN003 for South Korea

On March 11, 2019, we entered into a collaboration and license agreement with BioGenetics, pursuant to which we granted BioGenetics the exclusive right to commercialize, and if agreed, manufacture, ASLAN003 for the treatment of all indications in South Korea. In consideration of the rights granted to BioGenetics under the agreement, we received an upfront payment of \$1 million from BioGenetics and are eligible to receive up to \$8 million in sales and development milestones, the thresholds for payment of such sales milestones being the aggregate of sales of *varlitinib* under the license summarized above and sales of ASLAN003 products. We are also eligible to receive tiered double-digit royalties on net sales up to a percentage within the mid-twenties. BioGenetics agreed to contribute to the global *research and development* costs incurred by ASLAN in the clinical development of ASLAN003 in acute myeloid leukemia. BioGenetics will be responsible for obtaining initial and all subsequent regulatory approvals of ASLAN003 in South Korea. We may provide clinical drug supplies to BioGenetics required for regulatory filings and for commercialization of products, pursuant to a separate manufacturing and supply agreement which the parties shall use commercially reasonable efforts to enter into no later than June 30, 2020.

During the license period and for one year thereafter, neither BioGenetics, nor any of its affiliates, will participate in or fund, directly or indirectly, the development, manufacture or commercialization of a product which competes with ASLAN003. The license period commences on the effective date of the agreement and, unless terminated earlier pursuant to the terms of the agreement, or is mutually agreed to be extended, expires on the tenth anniversary of first commercial sale, subject to a right of automatic renewal for a further year upon either party's notice. Either party may terminate the agreement in the event of material breach by, or insolvency of, the other party, or in the event of a material safety risk associated with the product. On any termination of the agreement, the license granted to BioGenetics will terminate, subject to certain transitional provisions.

License Agreement with Array

On January 3, 2018, we entered into a new license agreement with Array pursuant to which we obtained an exclusive, worldwide license to develop, manufacture and commercialize *varlitinib* for all human and animal therapeutic, diagnostic and prophylactic uses. This new license agreement replaces and supersedes our previous collaboration and license agreement with Array dated July 12, 2011.

Under the new license agreement, we agreed to use commercially reasonable efforts to obtain approval by the U.S. FDA or the applicable health regulatory authority and commercialize *varlitinib*.

In consideration of the rights granted to us under the agreement, we made an initial upfront payment to Array of \$12 million and an additional upfront payment of \$11 million in July 2018. In addition, we will be required to pay up to \$30 million if certain development milestones are achieved, \$20 million if certain regulatory milestones are achieved, and up to \$55 million if certain commercial milestones are achieved. We are also required to pay Array tiered royalties in the low tens on net sales of *varlitinib*. Our royalty obligations will continue on a country-by-country basis through the later of the expiration of the last valid patent claim for *varlitinib* or ten years after the first commercial sale of *varlitinib* in a given country.

If within two years of the date of the new license agreement we sublicense *varlitinib* and are paid an upfront payment, Array will further be entitled to receive one-half of the portion of any such upfront payment that exceeds a specified amount. In the event that the base royalty under a sublicense agreement is 20% or less, we will only be required to share with Array one-half of the amount actually received by us under such sublicense agreement in lieu of the tiered royalties described above, provided that the royalty paid in such case shall in no event be less than a royalty in the high single digit range. If we undergo a change in control during a defined period following execution of the new license agreement, Array will also be entitled to receive a low to mid single-digit percentage of the proceeds resulting from the change in control. Unless earlier terminated, the agreement will continue on a country-by-country basis until the expiration of the respective royalty obligations in such country. Upon such expiration in such country, Array will grant to us a perpetual, royalty-free, non-terminable, non-revocable, non-exclusive license to exploit certain know-how in connection with the development, manufacturing and/or commercialization of *varlitinib* for all human and animal therapeutic, diagnostic and prophylactic uses in such country. Either party may terminate the agreement (i) in the event of the other party's material breach of the agreement that remains uncured for a specified period of time or (ii) the insolvency of the other party. We may also terminate the agreement without cause at any time upon 180 days advance notice to Array.

Development and License Agreement with Almirall

On May 16, 2012, we entered into a development and license agreement with Almirall, pursuant to which we obtained an exclusive, worldwide license to certain patents, know-how and other intellectual property controlled by Almirall to a DHODH inhibitor, LAS186323, which we refer to as ASLAN003. The licensed field covered by this agreement was limited to the treatment or prevention of rheumatoid arthritis, excluding any topical formulation.

On December 21, 2015, we entered into an amended development and license agreement with Almirall which replaced the previous agreement, further amended by an amendment agreement entered into on March 16, 2018. Under the agreement as so amended, we obtained from Almirall an expanded exclusive, worldwide license to develop, manufacture and commercialize ASLAN003 products for all human diseases with primary focus on oncology diseases, excluding topically-administered products embodying the compound for keratinocyte hyperproliferative disorders, and the non-melanoma skin cancers basal cell carcinoma, squamous cell carcinomas and Gorlin Syndrome, or collectively, the KHD/NMSC products. We generally have the right to sublicense our rights under the agreement. If Almirall wishes to use a third party to develop KHD/NMSC products, we have a right of first negotiation to obtain a license from Almirall to carry out those developments.

Under the amended agreement, we are generally obligated to use commercially reasonable efforts to develop ASLAN003 products in accordance with the development plan, and to commercialize ASLAN003 products, either by ourselves or through sublicensees. We agreed not to develop or commercialize any competing product that has the same mechanism of action as ASLAN003 while the intellectual property licensed from Almirall remains in force or for ten years after the launch of ASLAN003 products on a country-by-country basis, whichever is longer. In addition, we granted to Almirall the right to use certain developed know-how for Almirall's internal and commercial programs for KHD/NMSC products, and Almirall granted us the right to use certain know-how developed by or on behalf of Almirall in the course of its programs for KHD/NMSC products in the field licensed to ASLAN.

In consideration of the rights granted to us under the amended agreement, we will be required to pay an aggregate of up to \$30 million if certain development milestones are achieved and an aggregate of up to \$50 million if certain regulatory milestones are achieved, in each case across different indications. If we commercialize any ASLAN003 products, we will be required to pay Almirall tiered royalties in the mid single-digit range on net sales of ASLAN003 products, subject to adjustments in certain circumstances. In the event we sublicense any of our rights under the agreement relating to the ASLAN003 technology, we will be obligated to pay Almirall 10% of sublicensee income we may receive under such sublicenses.

Unless earlier terminated, the amended agreement continues indefinitely. Either party may terminate the agreement (i) in the event of the other party's material breach of the agreement that remains uncured for a specified period of time, (ii) if significant safety issues arise which make development or commercialization of the product unlawful or in violation of standard industry practices, (iii) if the other party becomes insolvent or (iv) if the continuation of the agreement is no longer commercially viable, as proven by us based on supporting objective data reasonably acceptable to Almirall and us. Almirall may terminate the agreement (i) if we fail to provide evidence of having used commercially reasonable efforts to pursue development or commercialization, (ii) if we challenge or assist third parties in challenging any intellectual property rights licensed from Almirall under the amended agreement, (iii) if there is a general withdrawal or recall of ASLAN003 products from any country, on a product-by-product and/or country-by-country basis or (iv) upon a change of control of ASLAN if such change of control could reasonably be expected to lead to an impairment to Almirall, subject to certain conditions. Under the agreement, an impairment in connection with a change of control will only be deemed to occur if Almirall

can demonstrate that (i) a competitor of Almirall will control us, (ii) the commercial value of ASLAN003 products may be damaged, (iii) the commercial value of Almirall's KHD/NMSC products may be adversely affected, (iv) Almirall's reputation or the reputation of any of Almirall's products or compounds in the marketplace may be damaged and/or (v) the party that will control us lacks the resources to maximize commercial sales of ASLAN003 products.

License Agreement with CSL

On May 12, 2014, we entered into a license agreement with CSL, pursuant to which we obtained an exclusive, worldwide license to certain patents, know-how and other intellectual property owned or controlled by CSL related to CSL's anti-IL13 receptor monoclonal antibody, CSL334, which we refer to as ASLAN004, and antigen binding fragments thereof. Under the agreement, we have the exclusive right to develop ASLAN004 products through clinical proof of concept for the treatment, diagnosis or prevention of diseases or conditions in humans. Although we do not have the right to commercialize ASLAN004 products ourselves, we have the right to grant the commercial rights to third parties after we achieve clinical proof of concept subject to certain conditions.

On September 18, 2018, we amended the license agreement with CSL, primarily to change the focus of the development program from asthma to atopic dermatitis.

We are obligated to develop ASLAN004 products through clinical proof of concept at our own expense, and we are required to achieve certain development milestones by specified dates.

In consideration of the rights granted to us under the agreement, we are required to pay to CSL a share in the range of 40 to 50 percent of all licensing revenue we receive. We are also responsible for all payments to third-party licensors to CSL, to the extent such obligations relate to our exploitation of the rights licensed under CSL's agreement with those parties.

The agreement continues until 12 months after the final development milestone date. However, if we have entered into a sublicense granting the right to commercialize ASLAN004 products to a third party before such date, then the agreement will be extended until the expiration or termination of such third-party sublicense.

Either party may terminate the agreement (i) in the event of the other party's material breach of the agreement that remains uncured for a specified period of time, (ii) under certain circumstances related to the safety of ASLAN004 or (iii) if the other party becomes insolvent. In addition, we may terminate the agreement under certain circumstances related to the development and commercialization of ASLAN004.

In the event that we enter into an agreement with a third party for the commercialization of ASLAN004 products, and such agreement subsequently expires by its terms, the license of CSL patents and know-how granted under the license agreement will become fully paid-up and perpetual as they relate to the agreement with the third party. If the agreement is terminated or expires and CSL subsequently commercializes ASLAN004 products or grants a third party rights to commercialize ASLAN004 products, then CSL will pay us royalties on the net sales of ASLAN004 products or share license revenue with us (whichever is applicable).

Intellectual Property

Patents

Our commercial success depends in part on our ability to identify, obtain and seek protection for our products, drug candidates and our core technologies employing a combination of patent rights, trade secrets, confidentiality agreements and contractual obligations and to operate without infringing, misappropriating or otherwise violating on the proprietary rights of third parties. It is also important we prevent others from infringing, misappropriating or otherwise violating our proprietary or intellectual property rights.

Our intellectual property strategy is, where appropriate, to file new patent applications on inventions, including improvements to existing products/candidates and processes to improve our competitive edge or to improve business opportunities. We continually assess and refine our intellectual property strategy to endeavor to ensure it is fit for purpose.

Our strategy requires us to license assets from third parties with suitable protection and to identify and seek patent protection for our inventions, when possible. This process is expensive and time consuming and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost, in a timely manner or in all jurisdictions where protection may be commercially advantageous, or we may financially not be able to protect our proprietary rights at all. Despite our efforts to protect our proprietary rights, unauthorized parties may be able to obtain and use information we regard as proprietary. Generally, many therapeutic indications currently being pursued have a focus in Asia markets. Where possible, we seek to file in at least major commercial jurisdictions relevant to the product or technology, however, this is assessed on a case by case basis.

Licensing assets from third parties involves technical and scientific due diligence to assess the opportunity, the strength of the intellectual property protection for the asset and the ability to commercialize the asset. This due diligence is usually conducted over a relatively short period of time. It can be difficult to identify all the issues relevant to the assessment. Failure to identify all the relevant issues can impact negatively on the value of the asset.

The issuance of a patent does not ensure that it is valid or enforceable. Therefore, even if we are issued a patent, it may not be valid or enforceable against third parties. Issued patents may be challenged, narrowed, invalidated or circumvented. In addition, court decisions may introduce uncertainty in the enforceability or scope of patents owned by pharmaceutical and biotechnology companies. Thus, any of our patents, including patents that we may rely on to protect our market for approved drugs, may be held invalid or unenforceable by a court of final jurisdiction.

Because patent applications in the United States, Europe and many other jurisdictions are typically not published until 18 months after filing, and because publications of discoveries in scientific literature lag behind actual discoveries, we cannot be certain that we were the first to make the inventions claimed in our issued patents or pending patent applications, or that we were the first to file for protection of the inventions set forth in our patents or patent applications. As a result, we may not be able to obtain or maintain protection for certain inventions. Therefore, the enforceability and scope of our patents in the United States, Europe and in many other jurisdictions cannot be predicted with certainty and, as a result, any patents that we own or license may not provide sufficient protection against competitors. We may not be able to obtain or maintain patent protection from our pending patent applications, from those we may file in the future, or from those we may license from third parties. Moreover, even if we are able to obtain patent protection, such patent protection may be of insufficient scope to achieve our business objectives.

In addition, the issuance of a patent does not give us the right to practice the patented invention. Third parties may have blocking patents that prevent marketing of our products or working our own technology. We endeavor to identify early third party patents and patent applications which may be blocking to a product or technology, to minimize this risk. However, relevant documents may be overlooked or missed, which may in turn impact of the freedom to commercialize the relevant asset.

The term of a patent depends upon the laws of the country in which it is issued. In most jurisdictions, including the United States, Europe, China and Japan, the basic patent term is 20 years from the earliest filing date of a non-provisional patent application. In the United States, Europe and Japan, patents relating to inventions are effective for 20 years, subject to the payment of renewal fees. Some jurisdictions, such as the United States, Europe and Japan provide for up to an additional five years patent term extension for therapeutics products that require marketing approval. The requirements for this supplementary protection are set by the relevant authorities in the given jurisdiction. Products approved before the expiry of the basic patent term may benefit from such a patent term extension. It is our strategy to apply for such supplementary protection, where possible.

In addition to patent protection, statutory provisions in the United States, Europe and other countries may provide a period of clinical data exclusivity which may be followed by an additional period of market exclusivity to compensate for the time required for regulatory approval of our drug products. Once the relevant criteria are satisfied, the protection applies automatically. The length of protection depends on the jurisdiction and may also depend on the type of therapy.

Third parties may seek to market “similar” versions of our approved products. Alternatively, third parties may seek approval to market their own products, similar or otherwise, competitive with our products. We may not be able to block the commercialization of these products, which may erode our commercial position in the market place.

If disputes over intellectual property and other rights that we have licensed or co-own prevent or impair our ability to maintain our current licensing or exclusivity arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. In addition, under certain of our collaboration agreements, our licensors may retain the right to grant non-exclusive licenses to the licensed patents and technology to other academic or research institutions for non-commercial research purposes.

Certain provisions in the agreements under which we currently license intellectual property or technology to and from third parties may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, increase what we believe to be our financial or other obligations under the relevant agreement or decrease the third party’s financial or other obligations under the relevant agreement, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Licensed from Array

On July 12, 2011, we entered into a collaboration and license agreement with Array, relating to Array's pan-HER inhibitor, ARRY-543, which we refer to as ASLAN001 or *varlitinib*, pursuant to which we obtained an exclusive, worldwide license to develop products incorporating *varlitinib* as an active ingredient for the treatment or prevention of any diseases or conditions in humans, pursuant to an agreed development plan, and an exclusive, worldwide license to pursue a commercial licensing program in relation to such products. On January 3, 2018, we entered into a new license agreement with Array, which replaces and supersedes our previous collaboration and license agreement, pursuant to which we obtained an exclusive, worldwide license to develop, manufacture and commercialize *varlitinib* for all human and animal therapeutic, diagnostic and prophylactic uses.

The basic protection for *varlitinib* is provided by a family of composition of matter patents. These patents disclose a genus and also explicitly discloses *varlitinib* (example number 52 in WO2005/016346).

As of December 31, 2018, this family of patents included patents issued in the United States (at least three patents, some relating to intermediates and processes), Argentina, Australia, Canada, China (at least three patents), Chile, Colombia, Europe, Hong Kong, Indonesia, India, Iceland, Israel, Japan, South Korea, Macau, Mexico, Norway, New Zealand, Philippines, Russia, Singapore, Ukraine, South Africa, and Taiwan. In addition, as of December 31, 2018, this family of patents included patent applications filed in Brazil, Egypt and Venezuela. The scope of the claims may differ in the various countries. The normal expiration of this family of patents is November 2024 in the United States and August 2024 outside the United States, subject to the payment of renewal fees.

The first patent application filed in China was not granted based on a technicality of Chinese practice. Subsequently filed divisional patent applications were granted. If the validity of one or more of the granted divisional patents is challenged then one or more of these patents may ultimately be considered invalid. In China typically branded medicines may still grow their market share, even after patent expiration. This trend along with subsequently filed patent applications and the Chinese data exclusivity provisions may minimize the impact of negative decisions that may be received in respect of one or more of the divisional patents.

Protection for the synthetic process of making *varlitinib* and a key intermediate in that process may be provided from the family of patents derived from WO2007/059257, filed November 15, 2006. As of December 31, 2018, this family of patents includes issued patents in Australia, Canada, China, Colombia, Europe, Hong Kong, Iceland, Israel, Japan, South Korea, Mexico, Norway, Philippines, Russia, Singapore, Taiwan, Ukraine and the United States. In addition, as of December 31, 2018, this family of patents included patent applications filed in Brazil and India. The scope of the claims may differ in the various countries. The normal expiration of this family of patents is November 2026.

Owned by Us

We are the applicant on a number of pending patents mostly relating to medical uses or combination therapies. These include the following pending patent applications:

- published PCT application WO2017/037298 filed September 5, 2016 relates to use of *varlitinib* in sensitizing a patient to chemotherapy;
- published PCT application WO2017/037299 filed September 5, 2016 relates to use of *varlitinib* in the treatment of biliary tract cancer;

- published PCT application WO2017/037300 filed September 5, 2016 relates to use of *varlitinib* in treatment of resistant cancers;
- published PCT application WO2017/184086 filed April 21, 2017 relates to use of the *varlitinib* in the treatment of HCC; and
- published PCT application WO2018/004465 filed June 30, 2017, related to use of *varlitinib* as a maintenance therapy.

Normal expiration of these patents, if granted, is 2036, 2037 or 2038 subject to the payment of renewal fees. It is not clear what claims may be granted, if any, when these patents are pursued at the national and regional phase.

There are four unpublished PCT applications and at least five unpublished Singapore priority patent applications relating to use of *varlitinib*. These patent applications are at an early stage of filing and it is not possible to predict what claims may be ultimately granted, if any from these patent applications.

ASLAN003

Licensed from Almirall

On May 16, 2012, we entered into a development and license agreement with Almirall, pursuant to which we obtained an exclusive, worldwide license to certain patents, know-how and other intellectual property controlled by Almirall to a DHODH inhibitor, LAS186323, which we refer to as ASLAN003. On December 21, 2015, we entered into an amended development and license agreement with Almirall which replaced the previous agreement. This was further amended by an amendment agreement entered into on March 16, 2018. Under the amended agreement as so amended, we obtained from Almirall an expanded exclusive, worldwide license to develop, manufacture and commercialize ASLAN003 products for all human diseases with primary focus on oncology diseases, excluding topically-administered products embodying the compound for keratinocyte hyperproliferative disorders, and the non-melanoma skin cancers basal cell carcinoma, squamous cell carcinomas and Gorlin Syndrome.

The basic compound protection for ASLAN003 is provided by the composition of matter family of patents derived from WO2008/077639. As of December 31, 2018, this family of patents included patents issued in Australia, Canada, China, Europe, Hong Kong, Israel, Japan, Mexico, New Zealand, Nigeria, Norway, Peru, Russia, Singapore South Africa, South Korea, Taiwan, and the United States (two patents). In addition, as of December 31, 2018, this family of patents included patent applications filed in Argentina, Bolivia, Chile, Colombia, Ecuador, Egypt, Pakistan, Philippines, Thailand, Ukraine, Uruguay, Venezuela and Vietnam. The scope of the claims may differ in different countries. The normal expiration of this family of patents is December 2027, subject to the payment of renewal fees.

Owned by Us

We are the applicant on a number of pending patents mostly relating to medical uses or combination therapies. These include the following pending patent applications:

- published PCT application WO2018/136009 filed January 19, 2018 relates to use of *ASLAN003* in a combination therapy;
- published PCT application WO2018/136010 filed January 19, 2018 relates to use of *ASLAN003* in a combination therapy;

- published PCT application WO2018/160138 filed Mar 1, 2018 relates to use of ASLAN003 in treatment of hematological cancers;
- published PCT application WO2018/222134 filed April 30, 2018 relates to use of the ASLAN003 in the treatment of a new indication; and
- published PCT application WO2018/222135 filed April 30, 2018 relates to use of the ASLAN003 in the treatment of a specific patient population.

We also have two unpublished Singapore priority patent applications related to specific uses of ASLAN003.

ASLAN004

On May 12, 2014, we entered into a license agreement with CSL, pursuant to which we obtained an exclusive, worldwide license to certain patents, know-how and other intellectual property owned or controlled by CSL related to CSL's anti-IL13 receptor monoclonal antibody, CSL334, which we refer to as ASLAN004, and antigen binding fragments thereof. This was further amended by an amendment agreement entered into on September 18, 2018, primarily to change the focus of the development program from asthma to atopic dermatitis.

The basic compound protection for ASLAN004 is provided by a species (specific sequence) composition of matter family of patents is derived from WO2008/060813, filed October 19, 2007. As of December 31, 2018, this family of patents included patents issued in Australia (two patents), Canada, China, Europe (two patents), Hong Kong (two patents), Japan (two patents), and the United States (four patents). The normal expiration of this family of patents is October 2027, subject to the payment of renewal fees. The situation for patent term extensions for biological molecules, such as antibodies, may be more complicated than for small molecules, because generally the original legislation was written with reference to small molecules. Having said that, the period of data exclusivity available in the United States may be 12 years.

We have two unpublished Singapore priority patent applications filed in the joint names of ASLAN and CSL, one related to a specific therapeutic use for ASLAN004, and the other for a formulation of ASLAN004. These applications are at an early stage of filing and it is not possible to predict what claims may be ultimately granted. We expect that there may opportunities to file further new jointly owned patent applications on aspects of the manufacturing process and ASLAN004 formulation.

Trade Secrets

In addition to patents, we rely upon unpatented trade secrets and know-how and continuing technological innovation to develop and maintain our competitive position. However, trade secrets and know-how can be difficult to protect. We seek to protect our proprietary information, in part, by executing confidentiality agreements with our partners, collaborators, scientific advisors, employees, consultants and other third parties, and invention assignment agreements which are included in the engagement and employment contracts we have with our consultants and employees. The confidentiality agreements we enter into are designed to protect our proprietary information and the agreements or clauses requiring assignment of inventions to us are designed to grant us ownership of technologies that are developed through our relationship with the respective counterparty. We cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary technology and processes or that these agreements will afford us adequate protection of our intellectual property and proprietary information rights. If any of the partners, collaborators, scientific advisors,

employees and consultants who are parties to these agreements breaches or violates the terms of any of these agreements or otherwise discloses our proprietary information, we may not have adequate remedies for any such breach or violation, and we could lose our trade secrets as a result. If we are unable to maintain the confidentiality of our trade secrets, our business and competitive position may be harmed.

Trademarks and Domain Names

We conduct our business using the trademark “ASLAN,” “ASLAN PHARMACEUTICALS” and our lion logo, as well as domain names incorporating either or both of these trademarks. “ASLAN PHARMACEUTICALS” has been registered in Singapore. In terms of Chinese character versions of our trademarks, in Taiwan, we have a trade mark registration for: “亞獅康藥品”. In China, we have a trademark registration for “亞獅康私人有限公司”. We also have a trade mark registration in China to protect the following Chinese character version of the word *varlitinib*: “韋利替尼” (wei li ti ni). We have a portfolio of 20 domain names, which includes: aslanpharma.com, aslanpharma.com.sg, aslanpharma.com.tw, aslanpharma.asia, aslanpharma.org, and aslanpharma.biz.

Government Regulation

The U.S. FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the clinical development, manufacture and marketing of pharmaceutical products. These agencies and other federal, state and local entities regulate research and development activities and the testing, manufacture, quality control, safety, effectiveness, labeling, storage, packaging, recordkeeping, tracking, approval, import, export, distribution, advertising and promotion of our products.

U.S. Government Regulation of Drug Products

In the United States, the U.S. FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FFDCA, and its implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to a variety of administrative or judicial sanctions, such as the U.S. FDA’s refusal to approve pending NDAs, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties.

The process required by the U.S. FDA before product candidates may be marketed in the United States generally involves the following:

- nonclinical laboratory and animal tests that must be conducted in accordance with GLP;
- submission of an IND, which must become effective before clinical trials may begin;
- approval by an independent institutional review board, or IRB, for each clinical site or centrally before each trial may be initiated;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the proposed product candidate for its intended use, performed in accordance with current clinical practices, or cGCP;

- submission to the U.S. FDA of an NDA and payment of user fees;
- satisfactory completion of a U.S. FDA advisory committee review, if applicable;
- pre-approval inspection of manufacturing facilities and selected clinical investigators for their compliance with cGMP, and cGCP;
- satisfactory completion of U.S. FDA audits of clinical trial sites to assure compliance with cGCP and the integrity of the clinical data;
- FDA approval of an NDA to permit commercial marketing for particular indications for use; and
- compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy, or REMS, and the potential requirement to conduct post-approval studies.

The testing and approval process requires substantial time, effort and financial resources. Preclinical studies include laboratory evaluation of drug substance chemistry, pharmacology, toxicity and drug product formulation, as well as animal studies to assess potential safety and efficacy. Prior to commencing the first clinical trial with a product candidate, we must submit the results of the preclinical tests and preclinical literature, together with manufacturing information, analytical data and any available clinical data or literature, among other things, to the U.S. FDA as part of an IND. Some preclinical studies may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the U.S. FDA, unless the U.S. FDA, within the 30-day time period, raises safety concerns or questions about the conduct of the clinical trial by imposing a clinical hold. In such a case, the IND sponsor and the U.S. FDA must resolve any outstanding concerns before the clinical trial can begin. Submission of an IND may not result in U.S. FDA authorization to commence a clinical trial.

Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with cGCP requirements. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development, as well as amendments to previously submitted clinical trials. Further, an independent IRB for each study site proposing to conduct the clinical trial must review and approve the plan for any clinical trial, its informed consent form and other communications to study subjects before the clinical trial commences at that site. The IRB must continue to oversee the clinical trial while it is being conducted, including any changes to the study plans.

Regulatory authorities, an IRB or the sponsor may suspend or discontinue a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk, the clinical trial is not being conducted in accordance with the U.S. FDA's or the IRB's requirements, if the drug has been associated with unexpected serious harm to subjects, or based on evolving business objectives or competitive climate. Some studies also include a data safety monitoring board, which receives special access to unblinded data during the clinical trial and may advise us to halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy.

In general, for purposes of NDA approval, human clinical trials are typically conducted in three sequential phases that may overlap.

Phase 1—Studies are initially conducted to test the product candidate for safety, dosage tolerance, structure-activity relationships, mechanism of action, absorption, metabolism, distribution and excretion in healthy volunteers or subjects with the target disease or condition. If possible, Phase 1 trials may also be used to gain an initial indication of product effectiveness.

Phase 2—Controlled studies are conducted with groups of subjects with a specified disease or condition to provide enough data to evaluate the preliminary efficacy, optimal dosages and dosing schedule and expanded evidence of safety. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.

Phase 3—These clinical trials are undertaken in larger subject populations to provide statistically significant evidence of clinical efficacy and to further test for safety in an expanded subject population at multiple clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the product and provide an adequate basis for product labeling. These trials may be done globally to support global registrations so long as the global sites are also representative of the U.S. population and the conduct of the study at global sites comports with U.S. FDA regulations and guidance, such as compliance with cGCP.

The U.S. FDA may require, or companies may pursue, additional clinical trials after a product is approved. These so-called Phase 4 studies may be made a condition to be satisfied after approval. The results of Phase 4 studies can confirm the effectiveness of a product candidate and can provide important safety information.

Clinical trials must be conducted under the supervision of qualified investigators in accordance with cGCP requirements, which includes the requirements that all research subjects provide their informed consent in writing for their participation in any clinical trial, and the review and approval of the study by an IRB. Investigators must also provide information to the clinical trial sponsors to allow the sponsors to make specified financial disclosures to the U.S. FDA. Clinical trials are conducted under protocols detailing, among other things, the objectives of the trial, the trial procedures, the parameters to be used in monitoring safety and the efficacy criteria to be evaluated and a statistical analysis plan. Information about some clinical trials, including a description of the trial and trial results, must be submitted within specific timeframes to the National Institutes of Health, or NIH, for public dissemination on their ClinicalTrials.gov website.

The manufacture of investigational drugs for the conduct of human clinical trials is subject to cGMP requirements. Investigational drugs and active pharmaceutical ingredients imported into the United States are also subject to regulation by the U.S. FDA relating to their labeling and distribution. Further, the export of investigational drug products outside of the United States is subject to regulatory requirements of the receiving country as well as U.S. export requirements under the FFDCA. Progress reports detailing the results of the clinical trials must be submitted at least annually to the U.S. FDA and the IRB and more frequently if serious adverse events occur.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the product candidate as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

Orphan Drug Designation

Under the Orphan Drug Act, the U.S. FDA may designate a drug as an orphan drug if it is intended to treat a rare disease or condition (generally meaning that it affects fewer than 200,000 individuals in the United States, or more in cases in which there is no reasonable expectation that the cost of developing and making a drug available in the United States for treatment of the disease or condition will be recovered from sales of the product). Orphan product designation must be requested before submitting an NDA or Biologics License Application. After the

U.S. FDA grants orphan product designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the U.S. FDA. Orphan product designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

If a product with orphan status receives the first U.S. FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan product exclusivity, meaning that the U.S. FDA may not approve any other applications to market the same drug for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity or if the party holding the exclusivity fails to assure the availability of sufficient quantities of the drug to meet the needs of patients with the disease or condition for which the drug was designated. Competitors, however, may receive approval of different products for the same indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan product has exclusivity. Orphan medicinal product status in the European Union has similar, but not identical, benefits. For example, the European Union grants ten years of product exclusivity for orphan medicinal products.

Special U.S. FDA Expedited Review and Approval Programs

The U.S. FDA has various programs, including fast track designation, breakthrough therapy designation, accelerated approval, and priority review, which are intended to expedite or simplify the process for the development and U.S. FDA review of drugs that are intended for the treatment of serious or life threatening diseases or conditions and demonstrate the potential to address unmet medical needs. The purpose of these programs is to provide important new drugs to patients earlier than under standard U.S. FDA review procedures.

Under the fast track program, the sponsor of a new drug candidate may request that U.S. FDA designate the drug candidate for a specific indication as a fast track drug concurrent with, or after, the filing of the IND for the drug candidate. To be eligible for a fast track designation, the U.S. FDA must determine, based on the request of a sponsor, that a product is intended to treat a serious or life threatening disease or condition and demonstrates the potential to address an unmet medical need, or that the drug qualifies as a qualified infectious disease product, or QIDP, under the GAIN Act. The U.S. FDA will determine that a product will fill an unmet medical need if it will provide a therapy where none exists or provide a therapy that may be potentially superior to existing therapy based on efficacy or safety factors. Fast track designation provides additional opportunities for interaction with the U.S. FDA's review team and may allow for rolling review of NDA components before the completed application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA, the U.S. FDA agrees to accept sections of the NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA. However, U.S. FDA's time period goal for reviewing an application does not begin until the last section of the NDA is submitted. The U.S. FDA may decide to rescind the fast track designation if it determines that the qualifying criteria no longer apply.

In addition, a sponsor can request breakthrough therapy designation for a drug if it is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Drugs designated as breakthrough therapies are eligible for intensive guidance from U.S. FDA on an efficient drug development program, organizational commitment to the development and review of the product including involvement of senior managers, and, like fast track products, are also eligible for rolling review of the NDA. Both fast track and breakthrough therapy products are also eligible for accelerated approval and/or priority review, if relevant criteria are met.

Under the U.S. FDA's accelerated approval regulations, the U.S. FDA may approve a drug for a serious or life threatening illness that provides meaningful therapeutic benefit to patients over existing treatments based upon a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. A drug candidate approved on this basis is subject to rigorous post marketing compliance requirements, including the completion of Phase 4 or post approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post approval studies, or confirm a clinical benefit during post marketing studies, will allow U.S. FDA to withdraw the drug from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated approval regulations are subject to prior review by U.S. FDA.

Once an NDA is submitted for a product intended to treat a serious condition, the U.S. FDA may assign a priority review designation if U.S. FDA determines that the product, if approved, would provide a significant improvement in safety or effectiveness. A priority review means that the goal for the U.S. FDA to review an application is six months, rather than the standard review of ten months under current Prescription Drug User Fee Act, or PDUFA, guidelines. Under the current PDUFA agreement, these six and ten month review periods are measured from the 60-day filing date rather than the receipt date for NDAs for new molecular entities, which typically adds approximately two months to the timeline for review from the date of submission. Most products that are eligible for fast track breakthrough therapy designation are also likely to be considered appropriate to receive a priority review.

Even if a product qualifies for one or more of these programs, the U.S. FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for U.S. FDA review or approval will not be shortened. In addition, the manufacturer of an investigational drug for a serious or life threatening disease is required to make available, such as by posting on its website, its policy on responding to requests for expanded access. Furthermore, fast track designation, breakthrough therapy designation, accelerated approval and priority review do not change the standards for approval and may not ultimately expedite the development or approval process.

Assuming successful completion of the required clinical and preclinical testing, among other items, the results of product development, including chemistry, manufacture and controls, nonclinical studies and clinical trials are submitted to the U.S. FDA, along with proposed labeling, as part of an U.S. NDA. The submission of an NDA requires payment of a substantial user fee to the U.S. FDA. These user fees must be filed at the time of the first submission of the application, even if the application is being submitted on a rolling basis. Fee waivers or reductions are available in some circumstances. One basis for a waiver of the application user fee is if the applicant employs fewer than 500 employees, including employees of affiliates, the applicant does not have an approved marketing application for a product that has been introduced or delivered for introduction into interstate commerce, and the applicant, including its affiliates, is submitting its first marketing application.

In addition, under the Pediatric Research Equity Act, or PREA, an NDA or supplement to an NDA for a new active ingredient, indication, dosage form, dosage regimen or route of administration must contain data that are adequate to assess the safety and efficacy of the drug for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective.

The U.S. FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults or full or partial waivers from the pediatric data requirements.

The U.S. FDA must refer applications for drugs that contain active ingredients, including any ester or salt of the active ingredients, which have not previously been approved by the U.S. FDA to an advisory committee or provide in an action letter a summary of the reasons for not referring it to an advisory committee. The U.S. FDA may also refer drugs which present difficult questions of safety, purity or potency to an advisory committee. An advisory committee is typically a panel that includes clinicians and other experts who review, evaluate and make a recommendation as to whether the application should be approved and under what conditions. The U.S. FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

The U.S. FDA reviews applications to determine, among other things, whether a product is safe and effective for its intended use and whether the manufacturing controls are adequate to assure and preserve the product's identity, strength, quality and purity. Before approving an NDA, the U.S. FDA will inspect the facility or facilities where the product is manufactured. The U.S. FDA will not approve an application unless it determines that the manufacturing processes and facilities, including contract manufacturers and subcontracts, are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the U.S. FDA will typically inspect one or more clinical trial sites to assure compliance with cGCP.

Once the U.S. FDA receives an application, it has 60 days to review the NDA to determine if it is substantially complete to permit a substantive review, before it accepts the application for filing. Once the submission is accepted for filing, the U.S. FDA begins an in-depth review of the NDA. The U.S. FDA's NDA review times may differ based on whether the application is a standard review or priority review application. The U.S. FDA may give a priority review designation to drugs that are intended to treat serious conditions and provide significant improvements in the safety or effectiveness of the treatment, diagnosis, or prevention of serious conditions. Under the goals and policies agreed to by the U.S. FDA under the PDUFA, the U.S. FDA has set the review goal of 10 months from the 60-day filing date to complete its initial review of a standard NDA for a new molecular entity, or NME, and make a decision on the application. For non-NME standard applications, the U.S. FDA has set the review goal of 10

months from the submission date to complete its initial review and to make a decision on the application. For priority review applications, the U.S. FDA has set the review goal of reviewing NME NDAs within six months of the 60-day filing date and non-NME applications within six months of the submission date. Such deadlines are referred to as the PDUFA date. The PDUFA date is only a goal and the U.S. FDA does not always meet its PDUFA dates. The review process and the PDUFA date may also be extended if the U.S. FDA requests or the NDA sponsor otherwise provides additional information or clarification regarding the submission.

Once the U.S. FDA's review of the application is complete, the U.S. FDA will issue either a Complete Response Letter, or CRL, or approval letter. A CRL indicates that the review cycle of the application is complete and the application is not ready for approval. A CRL generally contains a statement of specific conditions that must be met in order to secure final approval of the NDA and may require additional clinical or preclinical testing, or other information or analyses in order for the U.S. FDA to reconsider the application. The U.S. FDA has the goal of reviewing 90% of application resubmissions in either two or six months of the resubmission date, depending on the kind of resubmission. Even with the submission of additional information, the U.S. FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those conditions have been met to the U.S. FDA's satisfaction, the U.S. FDA may issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. The U.S. FDA may delay or refuse approval of an NDA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product, or impose other conditions, including distribution restrictions or other risk management mechanisms. For example, the U.S. FDA may require a REMS as a condition of approval or following approval to mitigate any identified or suspected serious risks and ensure safe use of the drug. The U.S. FDA may prevent or limit further marketing of a product, or impose additional post-marketing requirements, based on the results of post-marketing studies or surveillance programs. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements, U.S. FDA notification and U.S. FDA review and approval. Further, should new safety information arise, additional testing, product labeling or U.S. FDA notification may be required.

If regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which such product may be marketed or may include contraindications, warnings or precautions in the product labeling, which has resulted in a Black Box warning. The U.S. FDA also may not approve the inclusion of labeling claims necessary for successful marketing. Once approved, the U.S. FDA may withdraw the product approval if compliance with pre- and post-marketing regulatory standards is not maintained or if problems occur after the product reaches the marketplace. In addition, the U.S. FDA may require Phase 4 post-marketing studies to monitor the effect of approved products, and may limit further marketing of the product based on the results of these post-marketing studies.

Post-Approval Requirements

Any products manufactured or distributed by us pursuant to U.S. FDA approvals are subject to continuing regulation by the U.S. FDA, including manufacturing, periodic reporting, product sampling and distribution, advertising, promotion, drug shortage reporting, compliance with any post-approval requirements imposed as a conditional of approval such as Phase 4 clinical trials, REMS and surveillance, recordkeeping and reporting requirements, including adverse experiences.

After approval, most changes to the approved product, such as adding new indications or other labeling claims are subject to prior U.S. FDA review and approval. There also are continuing, annual user fee requirements for any approved products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data. Drug manufacturers and their subcontractors are required to register their establishments with the U.S. FDA and certain state agencies and to list their drug products, and are subject to periodic announced and unannounced inspections by the U.S. FDA and these state agencies for compliance with cGMP and other requirements, which impose procedural and documentation requirements upon us and our third-party manufacturers.

Changes to the manufacturing process are strictly regulated and often require prior U.S. FDA approval before being implemented, or U.S. FDA notification. U.S. FDA regulations also require investigation and correction of any deviations from cGMP and specifications, and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance.

Later discovery of previously unknown problems with a product, including AEs of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in withdrawal of marketing approval, mandatory revisions to the approved labeling to add new safety information or other limitations, imposition of post-market studies or clinical trials to assess new safety risks, or imposition of distribution or other restrictions under a REMS program, among other consequences.

The U.S. FDA closely regulates the marketing and promotion of drugs. A company can make only those claims relating to safety and efficacy, purity and potency that are approved by the U.S. FDA. Physicians, in their independent professional medical judgement, may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the U.S. FDA. We, however, are prohibited from marketing or promoting drugs for uses outside of the approved labeling.

In addition, the distribution of prescription pharmaceutical products, including samples, is subject to the Prescription Drug Marketing Act, or PDMA, which regulates the distribution of drugs and drug samples at the federal level, and sets minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution. The Drug Supply Chain Security Act also imposes obligations on manufacturers of pharmaceutical products related to product and tracking and tracing.

Failure to comply with any of the U.S. FDA's requirements could result in significant adverse enforcement actions. These include a variety of administrative or judicial sanctions, such as refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, imposition of a clinical hold or termination of clinical trials, warning letters, untitled letters, cyber letters, modification of promotional materials or labeling, product recalls, product seizures or detentions, refusal to allow imports or exports, total or partial suspension of production or distribution, debarment, injunctions, fines, consent decrees, corporate integrity agreements, refusals of government contracts and new orders under existing contracts, exclusion from participation in federal and state healthcare programs, restitution, disgorgement or civil or criminal penalties, including fines and imprisonment. It is also possible that failure to comply with the U.S. FDA's requirements relating to the promotion of prescription drugs may lead to investigations alleging violations of federal and state healthcare fraud and abuse and other laws, as well as state consumer protection laws. Any of these sanctions could result in adverse publicity, among other adverse consequences.

Healthcare providers, physicians and third-party payors play a primary role in the recommendation and use of medical products and drug formulations that are granted marketing approval. Arrangements with third-party payors, existing or potential customers and referral sources, including healthcare providers, are subject to broadly applicable fraud and abuse and other healthcare laws and regulations, and these laws and regulations may constrain the business or financial arrangements and relationships through which manufacturers conduct clinical research, market, sell and distribute the products for which they obtain marketing approval. Such restrictions under applicable federal and state healthcare laws and regulations include the following:

- the U.S. Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in cash or kind, in exchange for, or to induce, either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers, on the one hand, and prescribers, purchasers and formulary managers, among others, on the other hand. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or PPACA, amended the intent requirement of the U.S. Anti-Kickback Statute. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to commit a violation. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution;
- the federal false claims and civil monetary penalties laws, including the False Claims Act, or FCA, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid or other third-party payors that are false or fraudulent, or making a false statement to avoid, decrease, or conceal an obligation to pay money to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes “any request or demand” for money or property presented to the U.S. government. In addition, manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to “cause” the submission of false or fraudulent claims. The FCA also permits a private individual acting as a “whistleblower” to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery. Government enforcement agencies and private whistleblowers have investigated pharmaceutical companies for or asserted liability under the FCA for a variety of alleged promotional and marketing activities, such as providing free product to customers with the expectation that the customers would bill federal programs for the product; providing consulting fees and other benefits to physicians to induce them to prescribe products; engaging in promotion for “off-label” uses; and submitting inflated best price information to the Medicaid Rebate Program. In addition, the PPACA codified case law that a claim including items or services resulting from a violation of the U.S. Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA.
- The Health Insurance Portability and Accountability Act of 1996, or HIPAA, prohibits, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services;

- the federal Physician Payments Sunshine Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid, or the Children’s Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to payments and other transfers of value to physicians, certain other healthcare providers and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their respective implementing regulations, imposes, among other things, specified requirements relating to the security, privacy and transmission of individually identifiable health information held by entities subject to HIPAA, such as health plans, health care clearinghouses and certain healthcare providers, known as covered entities, and their respective business associates, persons or entities that create, use, maintain or disclose individually identifiable health information on behalf of covered entities. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in U.S. federal courts to enforce the federal HIPAA laws and seek attorneys’ fees and costs associated with pursuing federal civil actions; and
- state and foreign law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; state and local laws that require the registration of pharmaceutical sales and representatives; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available, it is possible that certain business activities can be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws.

Violation of the laws described above or any other governmental laws and regulations may result in civil, criminal and administrative penalties, damages, fines, the curtailment or restructuring of operations, the exclusion from participation in federal and state healthcare programs, disgorgement, contractual damages, reputational harm, diminished profits and future earnings, imprisonment, and additional reporting requirements and oversight if a manufacturer becomes subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws. Furthermore, efforts to ensure that business activities and business arrangements comply with applicable healthcare laws and regulations can be costly for manufacturers of branded prescription products.

Significant uncertainty exists as to the coverage and reimbursement status of any products, for which we may obtain regulatory approval, and the procedures utilizing such products. In the United States, sales of any product candidates for which regulatory approval for commercial sale is obtained will depend in part on the availability of coverage and adequate reimbursement from third-party payors for the approved products, and procedures which utilize such products. Third-party payors include government authorities and health programs in the United States such as Medicare and Medicaid, managed care providers, private health insurers and other organizations. These third-party payors are increasingly reducing reimbursements for medical products and services. The process for determining whether a payor will provide coverage for a product, or procedures which utilizes such product, may be separate from the process for setting the reimbursement rate that the payor will pay for the product, or procedures which utilize such product. Third-party payors may limit coverage to specific products on an approved list, or formulary, which might not include all of U.S. FDA-approved products for a particular indication.

Additionally, the containment of healthcare costs has become a priority of federal and state governments. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of less expensive products and procedures. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue and results.

A payor's decision to provide coverage for a product, or procedures which utilize such product, does not imply that an adequate reimbursement rate will be approved. Further, coverage and reimbursement for products, and procedure which utilize such products, can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. In order to obtain coverage and reimbursement for any product that might be approved for sale, or any procedure which utilizes such product, it may be necessary to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the products, and procedures which utilize such products, in addition to the costs required to obtain regulatory approvals. If third-party payors do not consider a product, or procedures which utilize such product, to be cost-effective compared to other available therapies, they may not cover the product, or procedures which utilize such product, after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow a company to sell its products at a profit.

The marketability of any product candidates for which we or our collaborators receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement for the product, or any procedure which utilizes such product. In addition, emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on medical products and services pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we or our collaborators receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

In the European Union, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular product candidate to currently available therapies. European Union Member States may approve a specific price for a product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other member states allow companies to fix their own prices for products, but monitor and control company profits. The downward pressure on health care costs has become intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert competitive pressure that may reduce pricing within a country. Any country that has price controls or reimbursement limitations may not allow favorable reimbursement and pricing arrangements.

Health Reform

The United States and some foreign jurisdictions are considering or have enacted a number of reform proposals to change the healthcare system. There is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by federal and state legislative initiatives, including those designed to limit the pricing, coverage, and reimbursement of pharmaceutical and biopharmaceutical products as well as the procedures which utilize such products, especially under government-funded health care programs, and increased governmental control of health care costs.

By way of example, in March 2010, the PPACA was signed into law, which is intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add transparency requirements for the healthcare and health insurance industries, impose taxes and fees on the healthcare industry and impose additional health policy reforms. Among the provisions of the PPACA of importance to our business are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13.0% of the average manufacturer price for branded and generic drugs, respectively;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% (and 70% as of January 1, 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;

- establishment of a Center for Medicare and Medicaid Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending; and
- a licensure framework for follow on biologic products.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the PPACA, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the PPACA. Since January 2017, President Trump has signed two Executive Orders and other directives designed to delay the implementation of certain provisions of the PPACA or otherwise circumvent some of the requirements for health insurance mandated by the PPACA. In addition, CMS recently published a final rule that will give states greater flexibility in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the PPACA for plans sold through such marketplaces. Further, Congress has considered legislation that would repeal or repeal and replace all or part of the PPACA. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the PPACA have been signed into law. The Tax Cuts and Jobs Act of 2017, or Tax Act, includes a provision that repealed, effective January 1, 2019, the tax-based shared responsibility payment imposed by the PPACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the “individual mandate”. On January 22, 2018, President Trump signed a continuing resolution on appropriations for the year ended 2018 that delayed the implementation of certain PPACA-mandated fees, including the so-called “Cadillac” tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. The Bipartisan Budget Act of 2018, or the BBA, among other things, amended the PPACA, effective January 1, 2019, to close the coverage gap in most Medicare drug plans, commonly referred to as the “donut hole.” In July 2018, CMS published a final rule permitting further collections and payments to and from certain PPACA qualified health plans and health insurance issuers under the PPACA risk adjustment program in response to the outcome of federal district court litigation regarding the method CMS uses to determine this risk adjustment. On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas, or Texas District Court Judge, ruled that the individual mandate is a critical and inseparable feature of the PPACA, and therefore, because it was repealed as part of the Tax Act, the remaining provisions of the PPACA are invalid as well. While the Texas District Court Judge, as well as the Trump Administration and CMS, have stated that the ruling will have no immediate effect, it is unclear how this decision, subsequent appeals, and other efforts to repeal and replace the PPACA will impact the PPACA.

Other legislative changes have been proposed and adopted in the United States since the PPACA was enacted. For example, in August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by U.S. Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2012 through 2021, was unable to reach required goals, thereby triggering the legislation’s automatic reduction to several government programs.

This includes aggregate reductions of Medicare payments to providers of up to 2% per fiscal year, which went into effect in April 2013 and, due to subsequent legislative amendments to the statute, including the BBA, will remain in effect through 2027 unless additional Congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012, among other things, further reduced Medicare payments to certain providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Additionally, there have been several recent Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. At the federal level, the Trump administration's budget proposal for the year ended 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. Additionally, the Trump administration released a "Blueprint" to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug products paid by consumers. HHS has already started the process of soliciting feedback on some of these measures and, at the same, is immediately implementing others under its existing authority. For example, in September 2018, CMS announced that it will allow Medicare Advantage Plans the option to use step therapy for Part B drugs beginning January 1, 2019, and in October 2018, CMS proposed a new rule that would require direct-to-consumer television advertisements of prescription drugs and biological products, for which payment is available through or under Medicare or Medicaid, to include in the advertisement the Wholesale Acquisition Cost, or list price, of that drug or biological product. In addition, on January 31, 2019, the HHS Office of Inspector General, proposed modifications to the U.S. Anti-Kickback Statute discount safe harbor for the purpose of reducing the cost of drug products to consumers which, among other things, if finalized, will affect discounts paid by manufacturers to Medicare Part D plans, Medicaid managed care organizations and pharmacy benefit managers working with these organizations. Although a number of these, and other proposed, measures will require additional authorization to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

Further, on May 30, 2018, the Trickett Wendler, Frank Mongiello, Jordan McLinn, and Matthew Bellina Right to Try Act of 2017, or the Right to Try Act, was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug products that have completed a Phase I clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a pharmaceutical manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act.

Additional Regulation

In addition to the foregoing, state and federal laws regarding environmental protection and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservation and Recovery Act and the Toxic Substances Control Act, affect our business. These and other laws govern the use, handling and disposal of various biologic, chemical and radioactive substances used in, and wastes generated by, operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines. Equivalent laws have been adopted in other countries that impose similar obligations.

U.S. Foreign Corrupt Practices Act

The U.S. Foreign Corrupt Practices Act of 1977, as amended, or FCPA, prohibits corporations and individuals from engaging in certain activities to obtain or retain business or secure any improper advantage, or to influence a person working in an official capacity. It is illegal to pay, offer to pay or authorize the payment of anything of value to any employee or official of a foreign government or public international organization, or political party, political party official, or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. The scope of the FCPA also includes employees and official of state-owned or controlled enterprises, which may include healthcare professionals in many countries. Equivalent laws have been adopted in other foreign countries that impose similar obligations.

European Union General Data Protection Regulation

In addition to European Union regulations related to the approval and commercialization of our products, we may be subject to the European Union's General Data Protection Regulation, or GDPR. The GDPR imposes stringent requirements for controllers and processors of personal data of persons in the European Union, including, for example, more robust disclosures to individuals and a strengthened individual data rights regime, shortened timelines for data breach notifications, limitations on retention of information, increased requirements pertaining to special categories of data, such as health data, and additional obligations when we contract with third-party processors in connection with the processing of the personal data. The GDPR also imposes strict rules on the transfer of personal data out of the European Union to the United States and other third countries. In addition, the GDPR provides that European Union member states may make their own further laws and regulations limiting the processing of personal data, including genetic, biometric or health data.

The GDPR applies extraterritorially, and we may be subject to the GDPR because of our data processing activities that involve the personal data of individuals located in the European Union, such as in connection with any European Union clinical trials. Failure to comply with the requirements of the GDPR and the applicable national data protection laws of the European Union member states may result in fines of up to €20,000,000 or up to 4% of the total worldwide annual turnover of the preceding financial year, whichever is higher, and other administrative penalties. GDPR regulations may impose additional responsibility and liability in relation to the personal data that we process and we may be required to put in place additional mechanisms to ensure compliance with the new data protection rules.

China Government Regulation of Drug Products

In China, we operate in an increasingly complex legal and regulatory environment. We are subject to a variety of Chinese laws, rules and regulations affecting many aspects of our business. This section summarizes the principal Chinese laws, rules and regulations relevant to our business and operations.

Foreign Investment in the Pharmaceutical Industry

Investment activities in China by foreign investors are principally governed by the Guidance Catalogue of Industries for Foreign Investment, or the Catalogue, which was promulgated and is amended from time to time by the Ministry of Commerce, or MOFCOM, and the National Development and Reform Commission, or NRDC. Pursuant to the latest Catalogue, amended and issued on June 28, 2017 and effective on July 28, 2017, or the 2017 Catalogue, industries listed therein are divided into two categories: encouraged industries and the industries within the catalogue of special entry administrative measures, or the Negative List, amended and issued separately on June 28, 2018 and effective on July 28, 2018.

Establishment of wholly foreign-owned enterprises is generally allowed in industries outside of the Negative List. Foreign investors are not allowed to invest in industries that are expressly prohibited in the Negative List. The industries that are not expressly prohibited in the Negative List are subject to government approvals and certain special requirements. For instance, some are limited to equity or contractual joint ventures, while in some cases Chinese partners are required to hold the majority interests in such joint ventures. Industries not listed in the Catalogue are generally open to foreign investment unless specifically restricted by other People's Republic of China, or PRC, regulations.

Pursuant to the Negative List updated in June 2018, the manufacture of pharmaceutical products mostly falls outside of the Negative List.

Under Chinese law, the establishment of a wholly foreign-owned enterprise is subject to the approval of, or the requirement for record filing with, MOFCOM or its local counterparts and the wholly foreign owned enterprise must register with the competent administrative bureau of market regulation. We have completed the record filing with MOFCOM or its local counterparts for our interest in our wholly-owned PRC subsidiary and completed the registration of our PRC subsidiary with the competent administrative bureau of market regulation.

In October 2016, MOFCOM issued the Interim Measures for Record-filing Administration of the Establishment and Change of Foreign-invested Enterprises, or FIE Record-filing Interim Measures. Pursuant to FIE Record-filing Interim Measures, the establishment and change of foreign-invested enterprises are subject to record-filing procedures, instead of prior approval requirements, provided that the establishment or change does not involve special entry administrative measures. If the establishment or change of FIE matters involve the special entry administrative measures, the approval of MOFCOM or its local counterparts is still required.

General Regulations of the NMPA

In China, the NMPA monitors and supervises the administration of pharmaceutical products, as well as medical devices and equipment. The NMPA's primary responsibility includes evaluating, registering and approving new drugs, generic drugs, imported drugs and traditional Chinese medicines; approving and issuing permits for the manufacture, export and import of pharmaceutical products and medical appliances; approving the establishment of enterprises for pharmaceutical manufacture and distribution; formulating administrative rules and policies concerning the supervision and administration of food, cosmetics and pharmaceuticals; and handling significant accidents involving these products. Local provincial drug administrative authorities are responsible for supervision and administration of drugs within their respective administrative regions.

The Drug Administration Law of China promulgated by the Standing Committee of the National People's Congress in 1984 and the Implementing Measures of the Drug Administration Law of China promulgated by the Ministry of Health, or MOH in 1989 set forth the legal framework for the administration of pharmaceutical products, including the research, development and manufacturing of drugs.

The Drug Administration Law of China went through several revisions and was last revised in April 2015. The purpose of the revisions was to strengthen the supervision and administration of pharmaceutical products and to ensure the quality and safety of those products for human use. The Drug Administration Law of China regulates and prescribes a framework for the administration of pharmaceutical preparations of medical institutions and for the development, research, manufacturing, distribution, packaging, pricing and advertisement of pharmaceutical products. The Implementing Measures of the Drug Administration Law of China promulgated by the State Council and most recently revised in February 2016 provide detailed implementing regulations for the revised Drug Administration Law of China.

According to the Provisions for Drug Registration promulgated by the CFDA (now the NMPA) in 2007, the Drug Administration Law of China, the Provisions on the Administration of Special Examination and Approval of Registration of New Drugs, the Special Examination and Approval Provisions issued by the CFDA in 2009, and the Circular on Information Publish Platform for Pharmaceutical Clinical Trials issued by the CFDA in 2013, we must comply with the following procedures and obtain several approvals for clinical trials and production of new drugs.

New Drug Application

When clinical trials have been completed, an applicant shall apply to the NMPA for approval of a new drug application. The NMPA, the Center for Drug Evaluation, or the CDE, and the Drug Inspection Institution will conduct reviews and on-site inspections. The NMPA determines whether to approve the application according to the comprehensive evaluation opinions produced by the reviews and on-site inspections. We must obtain approval of our new drug applications before our drugs can be manufactured and sold in the Chinese market.

According to the Provisions for Drug Registration, drug registration applications are divided into three different types, namely Domestic New Drug Application, Domestic Generic Drug Application, and Imported Drug Application.

Drug Registration Classification

In March 2016, the CFDA (now NMPA) promulgated the Work Plan for Reforming the Chemical Medicines Registration Classification System, under which, the registrations of chemical medicines are divided into five categories as follows:

- Category 1: Innovative drugs that are not marketed anywhere in the world. These drugs contain new compounds with clear structures and pharmacological effects and they have clinical value.
- Category 2: Modified new drugs that are not marketed anywhere in the world. With known active components, the drug's structure, phase, prescription manufacturing process, administration route and indication are optimized and it has obvious clinical advantage.
- Category 3: Generic drugs, that have equivalent quality and efficacy to the originator's drugs have been marketed abroad, but not yet in China.
- Category 4: Generic drugs, that have equivalent quality and efficacy to the originator's drugs and have been marketed in China.
- Category 5: Drugs that have been marketed abroad are applied to be marketed domestically in China.

The registration of Category 1 or Category 2 drugs above will be subject to the requirements of the Domestic New Drug Application, Category 3 or Category 4 drugs will be subject to the Domestic Generic Drug Application, and Category 5 drugs will be subject to the Imported Drug Application.

Special Examination and Approval Procedures for Innovative Drugs

According to the Special Examination and Approval Provisions, the NMPA will conduct special examination and approval for new drugs registration application when:

- (1) the effective constituent of drug extracted from plants, animals, minerals, etc. as well as the preparations thereof have never been marketed in China, and the material medicines and the preparations thereof are newly discovered;
- (2) the chemical raw material medicines as well as the preparations and biological products thereof haven't been approved for marketing home and abroad;
- (3) the new drugs are for treating AIDS, malignant tumors and rare diseases, etc., and have obvious advantages in clinic treatment; or
- (4) the new drugs are for treating diseases with no effective methods of treatment.

The Special Examination and Approval Provisions provide that the applicant may file for special examination and approval at the stage of Clinical Trial Application if the drug candidate falls within items (1) or (2). For drug candidates that fall within items (3) or (4), the application for special examination and approval must be made when filing for production.

In addition, under the Special Examination and Approval Provisions, where a special examination and approval treatment is granted, the application for clinical trial and manufacturing will be handled with priority and with enhanced communication with the CDE of the NMPA, which will establish a working mechanism for communicating with the applicants. If it becomes necessary to revise the clinical trial scheme or make other major alterations during the clinical trial, the applicant may file an application for communication. When an application for communication is approved, the CDE will arrange the communication with the applicant within one month.

We believe that certain of our products fall within items (2) and (3) above. Therefore, we may file an application for special examination and approval at the Clinical Trial Application stage, which may enable us to pursue a more expedited path to approval in China and bring therapies to patients more quickly.

Reform of the Review and Approval Process for Drug Registration

In order to address a number of issues relating to the current drug registration system, in particular, long registration time, significant application backlog, low-quality drug application clinical data, and a difficult registration system for innovative drugs, the State Council and the NMPA have issued and implemented a numbers of opinions and orders.

In November 2015, the CFDA (now NMPA) released the Circular Concerning Several Policies on Drug Registration Review and Approval, which further clarified the following policies potentially simplifying and accelerating the approval process of clinical trials:

- A one-time umbrella approval procedure allowing approval of all phases of a new drug's clinical trials at once, rather than the current phase-by-phase approval procedure, will be adopted for new drugs' clinical trial applications.
- A fast track drug registration or clinical trial approval pathway will be available for the following applications: (i) registration of innovative new drugs treating HIV, cancer, serious infectious diseases and orphan diseases; (ii) registration of pediatric drugs; (iii) registration of geriatric drugs and drugs treating China-prevalent diseases; (iv) registration of drugs sponsored by national

science and technology grants; (v) registration of innovative drugs using advanced technology, using innovative treatment methods, or having distinctive clinical benefits; (vi) registration of foreign innovative drugs to be manufactured locally in China; (vii) concurrent applications for new drug clinical trials which are already approved in the U.S. or European Union, or concurrent drug registration applications for drugs which have applied for marketing authorization and passed onsite inspections in the U.S. or European Union and are manufactured using the same production line in China; and (viii) clinical trial applications for drugs with urgent clinical need and patent expiry within three years, and marketing authorization applications for drugs with urgent clinical need and patent expiry within one year.

In March 2016, the CFDA (now NMPA) issued the Interim Provisions on the Procedures for Drug Clinical Trial Data Verification that provides procedural rules for NMPA's on-site verification of clinical data before drug approvals.

In December 2017, the NMPA published the Opinions on Encouraging the Prioritized Evaluation and Approval for Drug Innovations, which introduces a prioritized review and approval pathway to clinical trial applications and registration applications of certain drugs as part of NMPA's ongoing reform of its current drug review and approval system.

Recent Regulatory Changes for Foreign New Drugs

Recent regulatory developments in late 2017 have evolved new drug applications for foreign new drugs in China. According to the Decision on Adjusting Relevant Matters Concerning the Administration of Imported Drug Registration issued by NMPA on October 10, 2017, for foreign new drugs that have never been marketed both domestically in China and abroad that fall into Category 1 and Category 2 drugs, an application for clinical trials and new drug registration may be submitted directly to the NMPA without a market approval issued in their home countries. Whereas in the past, overseas applicants had to wait until the new drug was first approved in an overseas country before it could file for new drug registration in China. Second, for those new drugs that have applied to conduct a Multi-Regional Clinical Trial, or MRCT, in China, Phase 1 clinical trials as required by NMPA may be conducted concurrently. Whereas in the past, MRCTs conducted in China could only be conducted after the drugs had obtained a market approval or passed Phase 2 or Phase 3 in an overseas country.

Third, after such MRCTs have been completed in China, a new drug application may be submitted to the NMPA directly for their review with no additional waiver of local clinical trial requirements is required. This may effectively shorten the registration period for Category 5 new drugs in China.

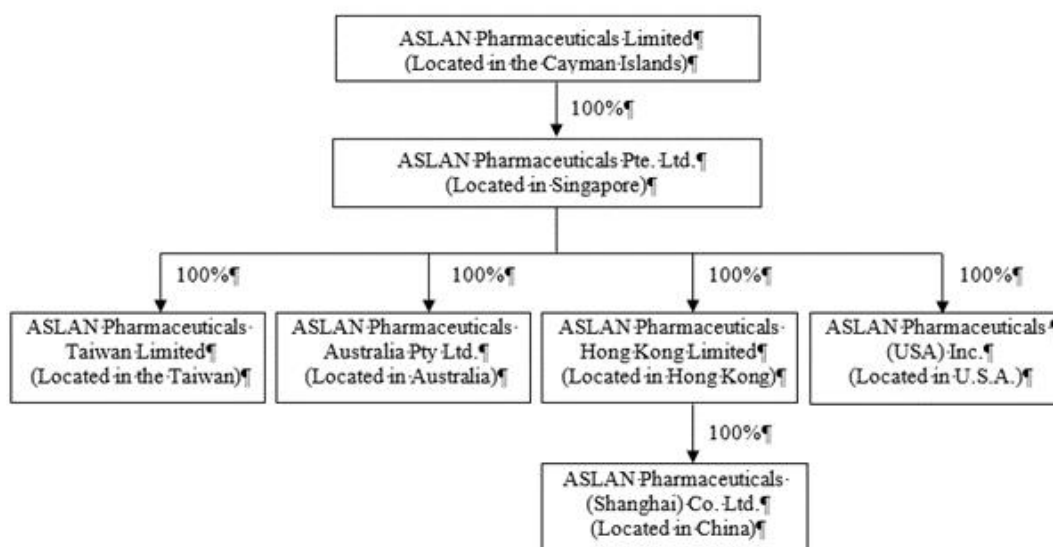
According to the Opinions on Deepening the Reform of the Evaluation and Approval System and Inspiring Innovation of Drugs and Medical Devices issued by the State Council on October 9, 2017, the clinical trial data obtained from foreign clinical trial institutions may be acceptable if they meet the relevant requirements in new drug applications in China, for which the supplement of clinical trial data on racial difference may be necessary. However, the relevant implementation guidelines have not been issued by the NMPA.

Last, the three-year pilot program of marketing authorization holders system that otherwise would expire on November 4, 2018, has been extended for one additional year. The marketing authorization holders system allows drug research and development institutions to obtain and hold the marketing authorization and have the ability to outsource manufacturing and distribution to third parties.

All facilities and techniques used in the manufacture of products for clinical use or for sale in China must be operated in conformity with good manufacturing practice guidelines as established by the NMPA. Failure to comply with applicable requirements could result in the termination of manufacturing and significant fines.

C. Organizational structure.

Name	Place of Incorporation	Date of Incorporation	Main Business
ASLAN Pharmaceuticals Limited	Cayman Islands	June 2014	Investment holding
ASLAN Pharmaceuticals Pte. Ltd.	Singapore	April 2010	New drug research and development
ASLAN Pharmaceuticals Taiwan Limited	Taiwan	November 2013	New drug research and development
ASLAN Pharmaceuticals Australia Pty Ltd.	Australia	July 2014	New drug research and development
ASLAN Pharmaceuticals Hong Kong Limited	Hong Kong	July 2015	New drug research and development
ASLAN Pharmaceuticals (Shanghai) Co. Ltd.	China	May 2016	New drug research and development
ASLAN Pharmaceuticals (USA) Inc.	United States of America	October 2018	New drug research and development



D. Property, plants and equipment.

Our corporate headquarters are located in Singapore, where we occupy approximately 4,500 square feet of office space, the lease for which expires in 2019. We also have offices in Taipei, Taiwan, and Shanghai, China. We lease all of our facilities and believe that our facilities are adequate to meet our needs for the immediate future, and that, should it be needed, suitable additional space will be available on commercially reasonable terms to accommodate any such expansion of our operations.

Item 4A. Unresolved Staff Comments

Not Applicable.

Item 5. Operating and Financial Review and Prospects

The following discussion and analysis of our financial condition and results of operations should be read together with Item 3.A. “Selected financial data” and our consolidated financial statements and related notes appearing elsewhere in this Annual Report. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those set forth in the Item 3.D. “Risk Factors” section of this Annual Report, our actual results could differ materially from the results described in or implied by these forward-looking statements. Please also see the section titled “Cautionary Statement Regarding Forward-Looking Statements.”

A. Operating results.

Overview

We are a clinical-stage oncology and inflammatory focused biopharmaceutical company based in Singapore developing novel therapeutics for global markets. We target diseases that are both highly prevalent in Asia and orphan indications in the United States and Europe. Our Asia development platform is designed to enable us to accelerate the development of drugs to treat these diseases. Our portfolio is comprised of four product candidates which target: validated growth pathways applied to new patient segments; novel immune checkpoints; and novel cancer metabolic pathways.

Our lead program, *varlitinib*, is a reversible small molecule pan-HER inhibitor that targets the human epidermal growth factor receptors HER1, HER2 and HER4. *Varlitinib* is currently being studied in a global pivotal clinical trial for biliary tract cancer for which we expect to report topline data in the second half of 2019. We focus on cancers, such as biliary tract cancer, that are orphan diseases in the United States and Europe for which there are few, if any, approved therapies. Although registration trials for orphan diseases may require fewer patients, recruitment for such trials in the United States and Europe is often challenging given the limited availability of suitable patients. Asia offers a unique opportunity to accelerate the development of novel therapies in diseases where either the cancers are more prevalent or the availability of suitable patients is greater.

Since our inception in 2010, we have devoted substantially all of our resources to acquiring rights to, and developing our product candidates, including preclinical studies and clinical trials and providing general and administrative support for our operations. We have not generated any revenue from product sales and we do not currently have any products approved for commercialization. We have financed our operations through a combination of debt and equity financings and government grants. Since inception we have raised \$167.2 million from the sale of our ordinary shares including \$33.0 million in a public offering conducted in Taiwan on June 1, 2017, \$42.2 million in a public offering conducted in the United States on May 4, 2018. Our ordinary shares are listed on the TPEX and our ADSs are listed on The Nasdaq Global Market. We recorded \$11.5 million of revenue for the year ended December 31, 2016, which was generated primarily through out-licensing activities. We did not generate revenue for the years ended December 31, 2017 and 2018. To date we have outsourced our manufacturing and clinical operations to third parties. We do not intend to operate our own clinical trials or build or acquire infrastructure for manufacturing our drugs for clinical or commercial supply. All of our clinical supplies are manufactured in accordance with cGMP using high quality contract manufacturing organizations based in the United States, Europe and Asia.

As of December 31, 2018, we had cash and cash equivalents of \$28.9 million. We have never been profitable and have incurred significant net losses in each period since our inception. Our consolidated net loss attributable to ordinary shareholders for the year ended December 31, 2016, 2017 and 2018 was \$9.0 million, \$39.9 million and \$42.2 million, respectively. We incurred net losses of \$9.0 million, \$39.9 million and \$42.2 million for the years ended December 31, 2016, 2017 and 2018, respectively. As of December 31, 2018, we had an accumulated deficit of \$132.5 million. Our primary use of cash is to fund research and development costs. Our operating activities used \$5.8 million, \$34.1 million and \$39.5 million of cash flows during the years ended December 31, 2016, 2017 and 2018, respectively. We expect to continue to incur significant expenses and operating losses for the foreseeable future.

We expect expenses to be incurred in connection with our ongoing activities as we:

- continue to invest in the clinical development of our product candidates, including in connection with the following planned and ongoing clinical trials:
 - o global pivotal clinical trial for *varlitinib* in biliary tract cancer;
 - o global Phase 2 clinical trials for ASLAN003 in AML;
 - o ASLAN004 Phase 1 clinical trials in atopic dermatitis; and
 - o any additional clinical trials that we may conduct for product candidates;
- identify and acquire new product candidates;
- engage third parties to manufacture product candidates for clinical trials and, if any product candidates are approved, for commercialization;
- establish a sales, marketing and distribution infrastructure;
- maintain, expand and protect our intellectual property portfolio; and
- incur additional costs with operating as a U.S. public company.

We will continue to require additional capital to support our operating activities as we advance our product candidates through clinical development, regulatory approval and, if any of our product candidates are approved, commercialization. The amount and timing of our future funding requirements will depend on many factors, including the pace and results of our product development efforts.

Out-licensing Agreements

To date, we have out-licensing arrangements with BMS and BioGenetics.

BMS

On November 2, 2011, we entered into a license agreement with BMS, pursuant to which we received exclusive rights to develop and commercialize ASLAN002 in China, Australia, South Korea, Taiwan and other selected Asian countries, and BMS retained exclusive rights in the rest of the world. On July 19, 2016, BMS initiated their rights pursuant to the agreement to buy back the exclusive rights from us to develop and commercialize ASLAN002. In connection with the buy-back, we received an upfront payment of \$10.0 million in 2016, and are eligible to receive additional payments upon BMS's achievement of development and regulatory milestones in the future. Furthermore, we are eligible to receive royalty payments on future worldwide sales generated by BMS. BMS also purchased from us research materials, supplies, research documentation and clinical trial results related to ASLAN002 for \$1.2 million, which was paid in 2016. As BMS has assumed the responsibility for all development and commercialization activities and expenses and we have no further obligations under the license agreement, we have recognized \$11.2 million in revenue for the year ended December 31, 2016. Since the conditions enabling capitalization of research and development costs related to ASLAN002 as an asset were not met and the research supplies related to ASLAN002 had no alternative future uses if the project is abandoned, all research and development expenditures were recognized in profit or loss when incurred. As a result, no cost of revenue was recorded in connection with the revenue recognized for the year ended December 31, 2016.

BioGenetics – License of varlitinib for South Korea

On February 27, 2019, we entered into a collaboration and license agreement with BioGenetics, pursuant to which we granted BioGenetics the exclusive right to commercialize, and if agreed, manufacture, *varlitinib* for the treatment of all indications in South Korea. In consideration of the rights granted to BioGenetics under the agreement, we received an upfront payment of \$2 million from BioGenetics and are eligible to receive up to \$11 million in sales and development milestones (the threshold for the sales milestones being subsequently amended by the ASLAN003 license summarized below). We are also eligible to receive tiered double-digit royalties on net sales up to a percentage within the mid-twenties. BioGenetics will be responsible for obtaining initial and all subsequent regulatory approvals of *varlitinib* in South Korea. We may provide clinical drug supplies to BioGenetics required for regulatory filings and for commercialization of products, pursuant to a separate manufacturing and supply agreement which the parties shall use commercially reasonable efforts to enter into no later than June 30, 2020.

BioGenetics – License of ASLAN003 for South Korea

On March 11, 2019, we entered into a collaboration and license agreement with BioGenetics, pursuant to which we granted BioGenetics the exclusive right to commercialize, and if agreed, manufacture, ASLAN003 for the treatment of all indications in South Korea. In consideration of the rights granted to BioGenetics under the agreement, we received an upfront payment of \$1 million from BioGenetics and are eligible to receive up to \$8 million in sales and development milestones, the thresholds for payment of such sales milestones being the aggregate of sales of *varlitinib* under the license summarized above and sales of ASLAN003 products. We are also eligible to receive tiered double-digit royalties on net sales up to a percentage within the mid-twenties. BioGenetics agreed to contribute to the global R&D costs incurred by ASLAN in the clinical development of ASLAN003 in acute myeloid leukemia. BioGenetics will be responsible for obtaining initial and all subsequent regulatory approvals of ASLAN003 in South Korea. We

may provide clinical drug supplies to BioGenetics required for regulatory filings and for commercialization of products, pursuant to a separate manufacturing and supply agreement which the parties shall use commercially reasonable efforts to enter into no later than June 30, 2020.

Hyundai

On October 30, 2015, we entered into a collaboration and license agreement with Hyundai, pursuant to which we granted Hyundai the right to develop and an option to commercialize *varlitinib* for the treatment of cholangiocarcinoma (subsequently amended to be for the treatment of BTC) in South Korea. In consideration of the rights granted to Hyundai under the agreement, we received an upfront payment of \$0.3 million from Hyundai in 2016. On February 26, 2019, prior to executing the broader agreement for *varlitinib* with BioGenetics above, we made a payment of \$325,000 to Hyundai to buy back the rights to *varlitinib* in BTC in South Korea and terminated the out-license to Hyundai.

In-licensing Agreements

We are required to make milestone payments upon the achievement of certain development, regulatory and commercial milestones and royalties based on the net sales of the licensed products and therefore, we expect our results of operations will continue to be affected by these agreements. In 2016, we made a payment of less than \$0.1 million to Exploit Technologies Pte Ltd to acquire their license that was capitalized as intangible assets. In 2018, we paid an aggregate of \$23 million to Array Biopharma Inc. to acquire an exclusive, worldwide license to develop, manufacture and commercialize *varlitinib*, which was capitalized as intangible assets. In June 2018, we paid \$0.5 million to CSL Limited upon the filing of our clinical trial authorization submission with the Singapore Health Sciences Authority, as required under the terms of our license agreement with CSL Limited. For the year ended December 31, 2018, we have not made any other payments related to the in-license agreements. See “Item 4.B. Information on the Company - Business overview—License and Collaboration Agreements” for a description of our license agreements, which includes a description of the termination provisions of these agreements.

Key Components of Results of Operations

Revenues

To date, we have not generated any revenue from product sales and do not expect to generate any revenue from product sales until our product candidates receive regulatory approval. For the year ended December 31, 2016, revenues consisted primarily of upfront payments received under out-licensing arrangements, as described above. We did not generate revenue for the years ended December 31, 2017 and 2018.

Cost of Revenue

In connection with the upfront payment that we received from Hyundai in 2016, we made a \$0.1 million payment to one of the third parties with whom we have a licensing agreement, and such payment was recognized as costs of revenue for the year ended December 31, 2016. We did not recognize costs of revenue for the years ended December 31, 2017 and 2018.

Research and Development Expenses

The largest component of our operating expenses since inception has been research and development activities, including the preclinical and clinical development of our product candidates. Research and development costs are expensed as incurred. Our research and development expenses primarily consist of:

- costs incurred under agreements with contract research organizations and investigative sites that conduct preclinical studies and clinical trials;
- costs related to manufacturing pharmaceutical active ingredients and product candidates for preclinical studies and clinical trials;
- salaries and personnel-related costs, including bonuses, related benefits and share-based compensation expense for our scientific personnel performing or managing out-sourced research and development activities;
- fees paid to consultants and other third parties who support our product candidate development;
- other costs incurred in seeking regulatory approval of our product candidates; and
- allocated facility-related costs and overhead.

Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. Accordingly, we expect research and development costs to increase significantly for the foreseeable future as our programs progress. However, we do not believe that it is possible at this time to accurately project total program-specific expenses through commercialization. Our expenditures on current and future preclinical and clinical development programs are subject to numerous uncertainties in timing and cost to completion. In addition, we may enter into additional collaboration arrangements for our product candidates, which could affect our development plans or capital requirements.

We allocate direct costs to product candidates when they enter into clinical development. For product candidates in clinical development, we allocate development and manufacturing costs to our product candidates on a program-specific basis, and we include these costs in the program-specific expenses. Our direct research and development expenses tracked by program consist primarily of external costs, such as fees paid to outside consultants, CROs, and CMOs in connection with our preclinical development, manufacturing and clinical development activities. We do not allocate employee costs or facility expenses, including other indirect costs, to specific programs because these costs are deployed across multiple programs and, as such, are not separately presented. We use internal resources primarily to oversee research and discovery as well as for managing our preclinical development, process development, manufacturing and clinical development activities. These employees work across multiple programs and, therefore, we do not track their costs by program.

The table below summarizes our research and development expenses incurred by program for the periods presented:

	Year ended December 31,		
	2016	2017	2018
	(in thousands)		
Direct research and development expense by product:			
Varlitinib	\$ 7,270	\$ 19,578	\$ 17,474
ASLAN003	312	778	1,623
ASLAN004	1,104	3,265	5,897
Other	839	1,368	2,241
Indirect research and development expense:			
Employee benefit and travel expense	3,230	4,381	4,320
Other indirect research and development expense	410	1,011	279
Total research and development expense	\$ 13,165	\$ 30,381	\$ 31,834

General and Administrative Expenses

General and administrative expenses consist of personnel costs, allocated expenses and other expenses for outside professional services, including legal, audit and accounting services. Personnel costs consist of salaries, bonuses, benefits and stock-based compensation. Other general and administrative expenses include facility-related costs not otherwise allocated to research and development expense, professional fees, expenses associated with obtaining and maintaining patents and costs of our information systems. We anticipate that our general and administrative expenses will continue to increase in the future as we increase our headcount to support our continued research and development and potential commercialization of our product candidates, as well as expenses related to compliance with the rules and regulations of the Securities and Exchange Commission, additional insurance expenses, investor relation activities and other administrative and professional fees.

Non-Operating Income and Expenses

Other Income

Other income is the gain recognized on the disposal of the licensed intellectual property and other rights arising from a third-party license agreement.

Other Gains and Losses, Net

Other gains and losses are primarily net gains and losses from realized and unrealized currency exchange differences incurred during the period.

Finance Costs

Finance costs are interest expenses primarily from the Singapore Economic Development Board, or EDB, repayable grant and the CSL Facility, as well as dividend accruals for preference shares from January to May 2016, all of which were converted into ordinary shares on May 27, 2016 in connection with our initial public offering in Taiwan. As of December 31, 2016, 2017 and 2018, the amount of funds disbursed under the EDB repayable grant plus accrued interest was \$8.3 million, \$9.7 million, and \$9.9 million, respectively. As of December 31, 2016 and 2017, there were no amounts outstanding under the CSL Facility, and \$4.1 million in principal and accrued interest outstanding as of December 31, 2018.

Results of Operations

The following table sets forth a summary of our consolidated results of operations for the periods indicated. This information should be read together with our consolidated financial statements and related notes included elsewhere in this Form 20-F. Our operating results in any period are not necessarily indicative of the results that may be expected for any future period.

	Year Ended December 31,		
	2016	2017	2018
	(in thousands)		
Net revenues	11,547	—	—
Cost of revenues	(125)	—	—
General and administrative expenses	(6,956)	(8,759)	(10,514)
Research and development expenses	(13,165)	(30,381)	(31,834)
Loss from operations	(8,699)	(39,140)	(42,348)
Interest income	47	363	268
Other income	—	—	187
Other gains and losses	127	(698)	213
Finance costs	(524)	(417)	(492)
Loss from before income tax	(9,049)	(39,892)	(42,172)
Income tax expense	—	—	(14)
Net loss attributable to ordinary shareholders	(9,049)	(39,892)	(42,186)
Weighted-Average shares used in calculating net loss per ordinary shares, basic and diluted	105,027,040	124,424,960	149,739,242
Net loss per share, basic and diluted	(0.09)	(0.32)	(0.28)

Comparison of the Years Ended December 31, 2017 and 2018

Revenue

We did not generate revenue for the years ended December 31, 2017 and 2018.

General and Administrative Expenses

The following table sets forth the components of our general and administrative expenses for the years indicated.

(In thousands)	Year Ended December 31,			
	2017	%	2018	%
General and administrative expenses				
Employee benefit and travel expenses	5,044	58%	6,527	62%
Professional fees	2,103	24%	2,263	22%
Rent relating to operating leases	882	10%	1,045	10%
Other costs	730	8%	679	6%
Total general and administrative expense	8,759	100%	10,514	100%

General and administrative expenses increased by \$1.7 million from \$8.8 million for the year ended December 31, 2017 to \$10.5 million for the year ended December 31, 2018. The increase in general and administrative expenses was primarily due to an increase in employee benefit and travel expenses, including an increase in headcount and staffing costs, and office administration costs.

Research and Development Expenses

The following table sets forth the components of our research and development expenses for the years indicated.

(In thousands)	Year Ended December 31,			
	2017	%	2018	%
Research and development expenses				
Preclinical and clinical development expenses	19,459	64%	21,361	67%
Manufacturing expenses	6,541	22%	6,153	19%
Employee benefit and travel expenses	4,381	14%	4,320	14%
Total research and development expenses	30,381	100%	31,834	100%

Research and development expenses increased by \$1.4 million from \$30.4 million for the year ended December 31, 2017 to \$31.8 million for the year ended December 31, 2018. The increase in research and development expenses was primarily due to an increase in preclinical and clinical development work as we advanced our drug candidate pipeline.

Other Gains and Losses, Net

Other net losses for the year ended December 31, 2017 were \$0.7 million and other net gains for the year ended December 31, 2018 were \$0.2 million, consisting primarily of realized and unrealized foreign exchange losses. The increase in net gains was primarily attributable to foreign currency translation gains as a result of the translation of our assets, liabilities and results of operations into U.S. dollars using the relevant foreign currency exchange rates. This was caused by the strengthening of the U.S. dollar against the Singapore dollar during those years.

Interest Income

Interest income for the years ended December 31, 2017 and 2018 were \$0.4 million and \$0.3 million, respectively. The decrease was primarily due to a decrease in deposits in banks in 2018.

Other Income

Other income for the year ended December 31, 2017 and 2018 were \$0 and \$0.2 million, respectively. The increase was primarily due to a gain on the disposal of intellectual property.

Net Loss Attributable to Ordinary Shareholders

For the years ended December 31, 2017 and 2018, we had a net loss attributable to ordinary shareholders of \$39.9 million and \$42.2 million, respectively. The increases in general and administrative expenses, and research and development expenses were the key drivers of the increased expenditure in 2018.

Comparison of the Years Ended December 31, 2016 and 2017

The following table sets forth a summary of our consolidated results of operations for the periods indicated. This information should be read together with our consolidated financial statements and related notes included elsewhere in this Form 20-F. Our operating results in any period are not necessarily indicative of the results that may be expected for any future period.

	Year ended December 31,	
	2016	2017
	(in thousands)	
Net revenue	\$ 11,547	\$ —
Cost of revenue	(125)	—
Operating expenses		
General and administrative expenses	(6,956)	(8,759)
Research and development expenses	(13,165)	(30,381)
Loss from operations	(8,699)	(39,140)
Non-operating income and expenses		
Other gains and losses, net	127	(698)
Finance costs	(524)	(417)
Interest income	47	363
Total non-operating income (expenses)	(350)	(752)
Loss before income tax	(9,049)	(39,892)
Income tax expense	—	—
Net loss	(9,049)	(39,892)
Total comprehensive loss	(9,049)	(39,892)

Revenue

Revenue was \$11.5 million for the year ended December 31, 2016, consisting primarily of an upfront milestone payment of \$10.0 million from BMS, a payment of \$1.2 million from BMS for the sale of research materials, supplies, research documentation and clinical trial results related to ASLAN002, as well as a payment of \$0.3 million from Hyundai related to the out-licensing of *varlitinib* in South Korea. We did not generate revenue for the year ended December 31, 2017.

General and Administrative

The following table sets forth a summary of our general and administrative expenses for the periods indicated.

General and administrative expenses for the years ended December 31, 2016 and 2017 were \$6.9 million and \$9.1 million, respectively. The increase in general and administrative expenses was primarily due to an increase in headcount and staffing costs, fund raising activity costs and office administration costs.

	Year ended December 31,	
	2016	2017
	(in thousands)	
General and administrative expense		
Employee benefit and travel expenses	\$ 4,678	\$ 5,044
Professional fees	1,316	2,103
Rent expense related to operating leases	280	882
Other costs	683	730
Total general and administrative expense	<u>\$ 6,957</u>	<u>\$ 8,759</u>

Research and Development

The following table sets forth a summary of our research and development expenses for the periods indicated.

Research and development expenses for the years ended December 31, 2016 and 2017 were \$13.2 million and \$30.0 million, respectively, consisting of expenditures relating to clinical development and clinical manufacturing work performed for our various product candidates. This was primarily due to the increased spending on the clinical trial activities and product manufacturing in connection with the development of our lead product candidate, *varlitinib*.

	Year ended December 31,	
	2016	2017
	(in thousands)	
Research and development expense		
Preclinical and clinical development expense	\$ 6,440	\$ 19,459
Manufacturing expense	3,495	6,541
Employee benefit and travel expenses	3,230	4,381
Total research and development expense	<u>\$ 13,165</u>	<u>\$ 30,381</u>

Other Gains and Losses, Net

Other net gains for the year ended December 31, 2016 were \$0.1 million and other net losses for the year ended December 31, 2017 were \$0.7 million, consisting primarily of realized and unrealized foreign exchange losses. The increase in net losses was primarily attributable to foreign currency translation losses as a result of the translation of our assets, liabilities and results of operations into U.S. dollars using the relevant foreign currency exchange rates. This was caused by the strengthening of the Singapore dollar against the U.S. dollar during those years.

Finance Costs

Finance costs for the years ended December 31, 2016 and 2017 were \$0.5 million and \$0.4 million, respectively, consisting primarily of interest expense related to interest accrued on long-term borrowings. The decrease was primarily due to the repayment of the CSL Facility in 2016 that resulted in less interest expenditure generated in 2017.

Interest Income

Interest income for the years ended December 31, 2016 and 2017 were \$0.1 million and \$0.4 million, respectively. The increase was primarily due to an increase in deposits in banks in 2017 that resulted in more interest income generated in 2017.

Net Loss Attributable to Ordinary Shareholders

For the years ended December 31, 2016 and 2017, we had a net loss attributable to ordinary shareholders of \$9.0 million and \$39.9 million, respectively. The increases in research and development expenses, general and administrative expenses and non-operating expenses were the key drivers of the increased expenditure in 2017.

B. Liquidity and Capital Resources

Since inception, we have invested most of our resources in the development of our product candidates, building our intellectual property portfolio, developing our supply chain, conducting business planning, raising capital and providing support for our operations. To date we have funded our operations through public and private placements of equity securities, upfront and milestone payments received from our collaborators, funding from governmental bodies and interest income from banks. Through December 31, 2018, we had raised aggregate gross proceeds of \$167.2 million from private and public offerings, we had received aggregate gross upfront payments of \$10.3 million from our collaborators and received an aggregate of \$7.4 million in grants from government bodies. Since our inception, we have incurred net losses and negative cash flows from our operations. Substantially all of our losses have resulted from funding our research and development programs and general and administrative costs associated with our operations. We incurred net losses of \$9.0 million, \$39.9 million and \$42.2 million for the years ended December 31, 2016, 2017 and 2018, respectively. As of December 31, 2018, we had an accumulated deficit of \$132.5 million. Our operating activities used \$5.8 million, \$34.1 million and \$39.5 million of cash outflows during the years ended December 31, 2016, 2017 and 2018 respectively. As of December 31, 2018, we had cash and cash equivalents of \$28.9 million.

We have not achieved profitability since our inception and we expect to continue to incur net losses for the foreseeable future. In January 2019, we implemented a corporate restructuring plan to focus our

resources on its lead clinical programs: varlitinib in biliary tract cancer (BTC), ASLAN003 in acute myeloid leukaemia (AML) and ASLAN004 in atopic dermatitis. As part of the corporate restructuring plan, we substantially reduced research and development costs and administrative expenses by closing certain studies and reducing our workforce. Based on our current operating plan, we believe that our existing cash and cash equivalents will enable us to fund our operating expenses and capital requirements for at least the next 12 months. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. If our planned preclinical and clinical trials are successful, or our other product candidates enter clinical trials or advance beyond the discovery stage, we will need to raise substantial additional financing in the future to fund our operations. In order to meet these additional cash requirements, we may incur debt, out-license certain intellectual property and seek to sell additional equity or convertible securities that may result in dilution to our stockholders. If we raise additional funds through the issuance of equity or convertible securities, these securities could have rights or preferences senior to those of our ADSs and ordinary shares and any indebtedness could contain covenants that restrict our operations. There can be no assurance that we will be able to obtain additional equity or debt financing on terms acceptable to us, if at all.

CSL Loan Facility

In connection with the license agreement with CSL Limited related to ASLAN004, in May 2014 we entered into the CSL Facility with CSL Finance, pursuant to which CSL Finance agreed to provide a ten-year facility for \$4.5 million. Borrowings under the CSL Facility are unsecured and can be used to reimburse a portion of eligible invoices for certain research and development costs or expenses incurred by us in connection with developing ASLAN004 and approved by CSL Finance at each drawdown period. Interest on the loan is computed at 6% plus LIBOR and is payable on a quarterly basis. Any outstanding principal on the loan must be repaid 10 years from the date of the CSL Facility. Amounts outstanding can be voluntarily prepaid. In addition, we are required to mandatorily prepay amounts outstanding if we receive any income or revenue in connection with the commercialization or out-licensing of any intellectual property rights (other than under the license agreement with CSL Limited related to ASLAN004), in which case we are required to apply at least a low double digit percentage of such income or revenue against any amounts then-outstanding under the CSL Facility.

Under the CSL Facility, we are subject to customary reporting and restrictive covenants. In addition, if Carl Firth, our chief executive officer, were to resign or be removed, we are obligated to find and hire within 12 months a replacement with the same level of experience, seniority and expertise commensurate with that of a CEO of a company in the same field of activity and similar size and resources as ours. If an event of default occurs, CSL Finance can terminate the commitment under the CSL Facility and accelerate all amounts outstanding.

As of December 31, 2016 and 2017, there were there were no amounts outstanding under the CSL Facility, and \$4.1 million in principal and accrued interest outstanding under the CSL Facility as of December 31, 2018.

Cash Flows

The following table provides information regarding our cash flows for the years ended December 31, 2016, 2017 and 2018:

(In thousands)	Year Ended December 31,		
	2016	2017	2018
Net cash used in operating activities	(5,789)	(34,117)	(39,470)
Net cash used in investing activities	(523)	(336)	(23,094)
Net cash provided by financing activities	30,987	33,289	40,899
Net increase/(decrease) in cash and cash equivalents	24,675	(1,164)	(21,665)

Net cash used in operating activities

The use of cash resulted primarily from our net losses adjusted for non-cash charges and changes in components of our operating assets and liabilities. The primary cash inflow was generated from the consideration received for the out-licensing of experimental drugs. The primary use of our cash was to fund the development of our research and development activities, regulatory and other clinical trial costs, and related supporting administration. Our prepayments and other current assets, accounts payable and other payables balances were affected by the timing of vendor invoicing and payments.

Net cash used in operating activities were \$34.1 million and \$39.5 million for the years ended December 31, 2017 and 2018, respectively. The increase of net cash used in operating activities for 2018 was primarily due to an increase of \$1.7 million related to general and administrative expenses, and an increase of \$1.4 million related to research and development expenses from 2017 to 2018, as we incurred more expenditures for our clinical trial activities.

Net cash used in operating activities were \$5.8 million and \$34.1 million for the years ended December 31, 2016 and 2017, respectively. The increase of net cash used in operating activities for 2017 was primarily due to the fact that no revenue was generated in 2017, compared to revenue of \$11.5 million generated from out-licensing activities in 2016, and an increase of \$17.2 million related to research and development expenses from 2016 to 2017 as we incurred more expenditures for our clinical trial activities of *varlitinib* and manufacturing activities in connection with the development of our various product candidates.

Net cash used in investing activities

Net cash used in investing activities was \$0.3 million and \$23.1 million for the years ended December 31, 2017 and 2018, respectively. The increase in cash used in investing activities for 2018 was primarily due to the purchase of the worldwide commercial rights for *varlitinib*.

Net cash used in investing activities was \$0.5 million and \$0.3 million for the years ended December 31, 2016 and 2017, respectively. The decrease of net cash used in investing activities for 2017 was primarily due to lower expenditures related to office equipment and leasehold improvements and intangible assets.

Net cash provided by financing activities

Net cash provided by financing activities was \$31.0 million, \$33.3 million, and \$40.9 million for the years ended December 31, 2016, 2017 and 2018, respectively, which consisted primarily of the net proceeds from our private financings in 2016, net proceeds from our initial public offering in Taiwan in 2017, and net proceeds from our issuance of ADSs in our initial public offering in the United States in 2018.

Critical Accounting Policies and Significant Judgments and Estimates

Critical Accounting Policies

Summarized below are our accounting policies that we believe are important to the portrayal of our financial results and also involve the need for management to make estimates about the effect of matters that are uncertain in nature. Actual results may differ from these estimates, judgments and assumptions. Certain accounting policies are particularly critical because of their significance to our reported financial results and the possibility that future events may differ significantly from the conditions and assumptions underlying the estimates used and judgments made by our management in preparing our financial statements. The following discussion should be read in conjunction with our consolidated financial statements and related notes, which are included in this Annual Report.

Revenue Recognition

Revenue comprises the fair value of the consideration received or receivable for the out-licensing of experimental drugs that have reached ‘proof of concept’ to business partners for ongoing global development and launch, in the ordinary course of our activities. Revenue is presented, net of goods and services tax, rebates and discounts.

We recognize revenue when we have completed the out-licensing of the experimental drug to business partners, such partners have accepted the products, and collectability of the related receivables is reasonably assured.

Typically the consideration received from out-licensing may take the form of upfront payments, option payments, milestone payments, and royalty payments on licensed products. To determine revenue recognition for contracts with customers, we perform the following five steps: (i) identify the contracts with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) we satisfy the performance obligations. At contract inception, we assess the goods or services promised within each contract, assess whether each promised good or service is distinct and identify those that are performance obligations. We recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Upfront License Fees

If a license to our intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, we recognize revenues from non-refundable, up-front fees allocated to the license when the license is transferred to the licensee and the licensee is able to use and benefit from the license. For licenses that are bundled with other performance obligations, we use judgment to assess the nature of the combined performance obligation to determine whether it is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. We evaluate the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition.

Milestone Payments

At the inception of each contract with customers that includes development or regulatory milestone payments (i.e., the variable consideration), we include some or all of an amount of variable consideration in the transaction price estimated only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized would not occur when the uncertainty related to the variable consideration is subsequently resolved. Milestone payments that are contingent upon the achievement of events that are uncertain or not controllable, such as regulatory approvals, are generally not considered highly probable of being achieved until those approvals are received, and therefore not included in the transaction price. At the end of each reporting period, we evaluate the probability of achievement of such milestones and any related constraints, and if necessary, may adjust our estimate of the overall transaction price.

Royalties

For arrangements that include sales-based royalties, including commercial milestone payments based on the level of sales, and for which the license is deemed to be the predominant item to which the royalties relate, we recognize revenue at the later of (i) when the subsequent sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, we have not recognized any royalty revenue resulting from any of out-licensing arrangements.

Acquired in-process research and development product candidate

In January 2018, we entered into a new license agreement with Array Biopharma Inc. to acquire an exclusive, worldwide license to develop, manufacture and commercialize *varlitinib* for all human and animal therapeutic, diagnostic and prophylactic uses. Since *varlitinib* is still under development and not yet approved for commercialization, the acquired in-process research and development costs related to *varlitinib* are capitalized as an indefinite-lived intangible asset until the completion or abandonment of the related research and development activities. When the related research and development is completed or a change in circumstance occurs that defines the useful life, the asset is reclassified to a definite-lived intangible asset and amortized over its estimated useful life.

Indefinite-lived intangible asset is not subject to amortization, but is tested annually for impairment or more frequently if there are indicators of impairment. In respect of the impairment indicators, we consider both internal and external sources of information to determine whether an asset may be impaired, which may include significant underperformance of the business in relation to expectations, significant negative industry or economic trends, and significant changes or planned changes with adverse effects in the use of the assets, as well as the internal reporting which indicates the economic performance of an asset is worse than expected. If any such indicators exist, we will estimate the recoverable amount of such indefinite-lived intangible asset and compare it with its carrying amount. Same as what is performed in the annual impairment testing, if the recoverable amount is less than its carrying amount, an impairment charge is recognized in the consolidated statements of comprehensive income accordingly. For the year ended December 31, 2018, we did not recognize any impairment charges related to the indefinite-lived intangible asset.

Realization of Deferred Income Tax Assets

When we have net operating loss carry forwards or temporary differences in the amount of tax recorded for tax purposes and accounting purposes, we may be able to reduce the amount of tax that we would otherwise be required to pay in future periods. We generally recognize deferred tax assets to the extent that it is probable that sufficient taxable benefits will be available to utilize. The income tax benefit or expense is recorded when there is a net change in our total deferred tax assets and liabilities in a period. The ultimate realization of the deferred tax assets depends upon the generation of future taxable income during the periods in which the net operating losses and temporary differences become deductible may be utilized. Since the determination of the amount of realization of the deferred tax assets is based, in part, on our forecast of future profitability, it is inherently uncertain and subjective. In cases where the actual profits generated are less than expected, a material adjustment of deferred tax assets may arise, which would be recognized in profit or loss for the period in which such adjustment takes place. As of December 31, 2017 and December 31, 2018, no deferred tax asset has been recognized on tax losses due to the unpredictability of future profit streams.

Research and Development Expenses

Research and development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and we intends to and has sufficient resources to complete development and to use or sell the asset. The conditions enabling capitalization of development costs as an asset have not yet been met and, therefore, all development expenditures are recognized in the consolidated statement of operations when incurred.

Share-Based Compensation

As of December 31, 2017 and 2018, there were options outstanding to purchase 14,530,879 and 14,343,213 ordinary shares, respectively. The options granted pursuant to our 2014 Employee Share Option Scheme Plan are either vested in full as of the date of grant or are 25% vested as of the date of grant, with the remaining 75% vesting in equal annual installments over the three years following the date of grant. Options granted pursuant to our 2017 Employee Share Option Plan 1 vest in full upon the second anniversary of the date of grant.

Equity-settled share-based payments to employees are measured at the fair value of the equity instruments at the grant date. The fair value determined at the grant date of the employee share options is expensed on a straight-line basis over the vesting period, based on the estimate of employee share options that will eventually vest, with a corresponding increase in capital surplus—employee share options. The fair value determined at the grant date of the employee share options is recognized as an expense in full at the grant date when the share options granted vest immediately.

At the end of each reporting period, we revise our estimate of the number of employee share options expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the capital surplus—employee share options.

We are responsible for determining the fair value of the stock options granted to employees following the regulatory requirements of the TPEX and using various information, including information provided by an independent third party valuation firm. The binomial option pricing model is applied in determining the estimated fair value of the options granted to employees. See footnote 18 to the consolidated financial statements included elsewhere in this Annual Report for further details on the assumptions used to estimate the fair value of share-based awards granted in prior periods.

JOBS Act

Subject to certain conditions set forth in the JOBS Act, we are entitled to rely on certain exemptions and reduced reporting requirements as an EGC. We are not required to, among other things, (i) provide an auditor’s attestation report on our system of internal controls over financial reporting pursuant to Section 404(b), (ii) provide all of the compensation disclosure that may be required of non-emerging growth public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act, (iii) comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements (including critical audit matters), and (iv) disclose certain executive compensation-related items such as the correlation between executive compensation and performance and comparisons of the chief executive officer’s compensation to median employee compensation. These exemptions will apply until December 31, 2023 or until we no longer meet the requirements of being an EGC, whichever is earlier.

Recently Issued Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 3, “Application of new standards, amendments and interpretations,” to our consolidated financial statements and related notes appearing elsewhere in this Annual Report.

C. Research and Development, Patents and Licenses, etc.

Full details of our research and development activities and expenditures are given in “Item 4.B. Information on the Company - Business overview” and “Item 5.A. Operating Results” within this Annual Report.

D. Trend Information.

See “Item 5.A. Operating Results” and “Item 5.B. Liquidity and Capital Resources” within this Annual Report.

E. Off-balance Sheet Arrangements.

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

F. Tabular Disclosure of Contractual Obligations.

The following table sets forth our contractual obligations as of December 31, 2018 (in thousands). Amounts we pay in future periods may vary from those reflected in the table.

	Total	Less than 1 year	2 – 3 years	4 – 5 years	More than 5 years
Operating lease obligations(1)	\$ 599	\$ 493	\$ 106	\$ —	\$ —
CSL loan facility(2)	\$ 4,060	\$ —	\$ —	\$ —	\$ 4,060
Total	<u>\$ 4,659</u>	<u>\$ 493</u>	<u>\$ 106</u>	<u>\$ —</u>	<u>\$ 4,060</u>

(1) Operating lease obligations reflect lease payments for our office space in Singapore, Taipei, Taiwan and Shanghai, China.

- (2) Reflects the principal amount outstanding under the CSL Facility as of December 31, 2018. Any outstanding principal on the loan must be repaid 10 years from the date of the CSL Facility. In addition, we are required to mandatorily prepay amounts outstanding if we receive any income or revenue in connection with the commercialization or out-licensing of any intellectual property rights (other than under the license agreement with CSL Limited related to ASLAN004), in which case we are required to apply at least a low double digit percentage of such income or revenue against any amounts then-outstanding under the CSL Facility.

The table above does not include:

- our repayment obligations under the loan from EDB, which are contingent on future events, and which as of December 31, 2018 was approximately \$9.9 million; and
- we also have obligations to make future payments to third party licensors that become due and payable on the achievement of certain development, regulatory and commercial milestones as well as tiered royalties on net sales. We have not included these commitments on our balance sheet or in the table above because the commitments are cancellable if the milestones are not complete and achievement and timing of these obligations are not fixed or determinable.

G. Safe Harbor

This Annual Report on Form 20-F contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act and as defined in the Private Securities Litigation Reform Act of 1995. See the section titled “Cautionary Statement Regarding Forward-Looking Statements” at the beginning of this Annual Report.

Item 6. Directors, Senior Management and Employees

A. Directors and senior management.

The following table sets forth information regarding our executive officers and directors, including their ages, as of March 31, 2019.

Name	Age	Position(s)
Executive Officers:		
Carl Firth, Ph.D.	46	Chief Executive Officer and Chairman
Mark McHale, Ph.D.	54	Chief Development Officer and Head of R&D
Ben Goodger	56	General Counsel
Kiran Asarpota	40	Vice President Finance
Stephen Doyle	46	Chief Business Officer
Non-Executive Directors:		
Abel Ang (representing Advanced Medtech Holdings Pte Ltd.)	45	Director
Jun Wu, Ph.D. (representing Alnair Investment)	52	Director
Lim Chin Hwee Damien (representing BV Healthcare II Pte Ltd.)	56	Director
Andrew Howden	59	Director
Kelvin Sun	56	Director
Robert E. Hoffman.	53	Director

Executive Officers

Carl Firth, Ph.D. Dr. Firth founded our company in 2010 and has served as our Chairman of the board of directors since June 2014, as our Chief Executive Officer since January 2011 and as a director since July 2010. Prior to founding our company, Dr. Firth was Head of Asia Healthcare at Bank of America Merrill Lynch, supporting public and private financing of healthcare companies and advising on M&A transactions, from January 2008 to June 2010. Prior to joining the banking industry, Dr. Firth worked for AstraZeneca from October 1998 to December 2007 in various commercial and R&D roles, including Regional Business Development Director, Asia Pacific, and Director of New Product Development, China. Dr. Firth is currently a member of Singapore's Health and Biomedical Sciences International Advisory Council, where he has served in such capacity since September 2017, and an independent director at Singapore's Exploit Technologies, a commercialization arm of A*STAR, which supports A*STAR in its efforts to transform the economy by driving innovation and commercializing its research outcomes, where he has served in such capacity since April 2014. Previously, Dr. Firth was an independent director of Hong Kong listed Uni-Bio Sciences, a leading Chinese biopharmaceutical company engaged in the research, development, production and commercialization of biopharmaceuticals for the Chinese healthcare market, where he served in such capacity from April 2014 to November 2017. Dr. Firth is an Adjunct Professor at Duke-NUS Medical School, a position he has held since June 2014. He holds a Ph.D. in Molecular Biology from Cambridge University (Trinity College), an Executive M.B.A. from London Business School, and a B.A. in Molecular Biology from Cambridge University.

Mark McHale, Ph.D. Dr. McHale helped found our company in 2010 and has served as our Chief Operating Officer since February 2011, and was appointed Chief Development Officer and Head of R&D for ASLAN in January 2019. Prior to joining us, Dr. McHale was the Head of Molecular Sciences at AstraZeneca, Respiratory & Inflammation, from 1997 to 2010. Dr. McHale was a core member of the respiratory strategy research team for half a decade where he led all new target identifications in asthma. Dr. McHale also previously worked from 1991 to 1997 at SmithKline Beecham (now GlaxoSmithKline Plc.), where he supported lead optimization projects in serotonin and dopamine receptors. Dr. McHale has a Ph.D. in Molecular Biology from the University of East Anglia in the United Kingdom, and a B.S. in Genetics and Molecular Biology from the University of London.

Ben Goodger. Mr. Goodger has served as our General Counsel since November 2016. Prior to joining us, Mr. Goodger was the Partner and Head of Intellectual Property (IP) Licensing and Transactions with Osborne Clarke in the United Kingdom, a multinational law firm, from November 2014 to October 2016. Mr. Goodger also previously served as Partner, Head of IP Commercialization, at Edwards Wildman in the United Kingdom, a multinational law firm, from November 2010 to October 2014, as Executive, Head of IP Commercial, at Rouse & Co. International in London, Oxford, and Shanghai, a multinational law firm, from December 1997 to October 2010, and as the President of Licensing Executives Society, a not for profit, non-political, umbrella organization, from 1998 to 1999. Mr. Goodger received his M.A. in English Literature & Language from Oxford University (Exhibitioner, Keble College) and he is a Solicitor of England & Wales, enrolled October 1986.

Kiran Asarpota. Mr. Asarpota has served as our Vice President Finance since November 2010. Prior to joining us, Mr. Asarpota was Group Finance Director at Global Brands Group Holding Limited, a public branded apparel company, from 2006 to 2010, where he was responsible for the group's corporate and commercial finance functions. Mr. Asarpota received his M.B.A. from London South Bank University in the United Kingdom, and a B.B.M. from Oxford Brookes.

Stephen Doyle. Mr. Doyle has served as our Vice President Commercial and Head of China since February 2018, and was appointed Chief Business Officer in January 2019. Prior to joining us, Mr. Doyle was the Vice President and Head of Specialty Care for China at Boehringer Ingelheim GmbH, a global pharmaceutical company, from January 2014 to February 2018. Mr. Doyle also previously served as the Vice President of Oncology, Haematology and Transplantation Business Unit with Sanofi S.A. in Shanghai, a global pharmaceutical company, from October 2010 to October 2013, as Regional Commercial Director for Oncology for Asia Pacific, Russia and India with Sanofi-aventis in Singapore, from 2007 to 2010, and as Director and Head of Scientific Communications, Global Marketing, Oncology Franchise with Sanofi-aventis in Paris from 2005 to 2007. Mr. Doyle holds a B.S. in Pharmacy from The Robert Gordon University in the United Kingdom and an M.S. in Clinical Pharmacy from the University of Derby in the United Kingdom.

Non-Executive Directors

Abel Ang. Mr. Ang has served as a member of our board of directors and representative for Advanced Medtech Holdings Pte Ltd. since April 2016. Mr. Ang currently serves as the Chief Operating Officer of Accuron Technologies Ltd., a precision engineering and technology company, and the acting Chief Executive Officer of Dornier MedTech Group, a urological medical equipment manufacturer, positions he has held since July 2014. He currently serves as a director of the Board of Economic Development Innovations Singapore Pte. Ltd., a privately-owned international economic development company, a position he has held since March 2013, as an independent director of Exploit Technologies Pte Ltd, the technology transfer arm of the Agency for Science, Technology and Research in Singapore, a position he has held since October 2012, and as a director of Advanced Materials Technologies Pte Ltd., a position he has held since July 2014. Mr. Ang served as the Senior Advisor to the CEO of Greatbatch Inc., providing guidance relative to the commercialization of medical device technologies in the cardiac, neurology, vascular and orthopedic markets, from 2006 to 2009. He has also held executive positions at Hill-Rom Inc., a provider of medical technologies for the health care industry, including the roles of President for the Asia Pacific region, Chief Technology Officer, and Vice President of several business units, from 2008 to 2012. Mr. Ang also formerly headed the global Medical Technology and Biotechnology industry groups at the Singapore Economic Development Board's Biomedical Division, from 2004 to 2006. Mr. Ang is currently an Adjunct Associate Professor at the Nanyang Business School in Singapore and Waseda University in Japan, where he teaches in their respective M.B.A. programs, positions he has held since 2013. Mr. Ang holds a M.S. in Computational Biology from Rutgers University in New Jersey, and a Bachelor of Communication Studies (First Class) from Nanyang Technological University Singapore.

Jun Wu, Ph.D. Dr. Wu has served as a member of our board of directors and representative for Alnair Investment since April 2016. Dr. Wu is currently the Chairman and Managing Partner at Cenova Ventures, a principal investment firm for healthcare venture funds, a position he has held since May 2009. Previously, Dr. Wu served as the Co-founder and Chief Executive Officer of Shanghai Genomics, a biotech company, from September 2001 to May 2005, and as an Executive Managing Director of GNI Limited, a Tokyo Exchange Listed biotech company, from June 2005 to April 2009. Dr. Wu has previously served as a director of over 20 companies and investment funds in the pharmaceutical industry. Dr. Wu holds a Ph.D. in Microbiology and Immunology from the University of California at San Francisco and a B.S. in Biology from San Jose State University.

Lim Chin Hwee Damien has served as a member of our board of directors and representative for BV Healthcare II Pte Ltd. since April 2016. He is the founder and currently serves as the General Partner of BioVeda Capital, a life science venture capital fund, a position he has held since 2000. He currently serves as a non-executive director of companies in a variety of industries. He has previously held senior positions in PrimePartners and Vickers Ballas Asset Management, both private equity asset management companies, and Morgan Grenfell Asia, a merchant bank now owned by Deutsche Bank. He received his B.B.A. from the University of Houston.

Andrew Howden. Mr. Howden has served as a member of our board of directors since April 2016. He currently serves as Chairman of the True Origins Company P/L, an Australian company involved in the marketing of infant formula in China and Asia, a position he has held since June 2016, and Executive Chairman of First Pharma P/L, an Australian pharmaceutical company, a position he has held since September 2016. He previously served as the Chief Executive Officer of iNova Pharmaceuticals, a global pharmaceutical company developing and commercializing drugs across a range of therapeutic areas, from August 2008 to February 2015. Previously, he was the President of IMS Health, Asia Pacific, a provider of information, services and technology for the healthcare industry, from 2007 to 2008, Regional Vice President of Asia Pacific for AstraZeneca, a multinational pharmaceutical and biopharmaceutical company, from 2002 to 2006, and he has held senior executive roles at Quintiles IMS Holdings, Inc., a public health information technologies and clinical research company, from 2000 to 2002. Mr. Howden has also previously served on the board of directors of over 20 companies within the pharmaceutical and healthcare industries. He received a B.S. and an M.Com. from the University of New South Wales, Australia.

Kelvin Sun. Mr. Sun has served as a member of our board of directors since April 2016. Mr. Sun has served as founder and president of Saga-Unitek Ventures, a venture capital and private equity fund management company, specializing in investing in middle-market, growth-oriented companies, as well as those funds under its management, since 1998. He currently serves as an independent director of TWi Pharmaceuticals Inc., a public Taiwanese pharmaceutical company, a position he has held since June 2012, as an independent director of Wonderful Hi-Tech Co. Ltd., a public Taiwanese electrical wire and cable manufacturing company, a position he has held since June 2010, and as an independent director of Tah Tong Textile Co., Ltd., a Taiwanese textile manufacturing company, a position he has held since June 2015. Mr. Sun also currently serves as a board member of Pixon Technologies, a Taiwanese optical light sources manufacturing company, a position he has held since June 2011, Newmax Technology Co., Ltd., a Taiwanese optical lens manufacturing company, a position he has held since December 2017 and the Taiwan Venture Capital Association, a position he has held since 2008. He previously served as the senior officer at Chengxin VC Group, a Taiwanese venture capital firm, from 1997 to 1998, as the Director for the Asian Engineering Center of Emerson Electric, a U.S. publicly listed industrial company, from 1995 to 1997, and as the R&D Section Leader at Prime Optical Fiber Corporation, a Taiwanese fiber optics manufacturing company, from 1992 to 1993. He holds an M.B.A. from the University of Michigan at Ann Arbor and an M.S. in Materials Science from Wayne State University.

Robert E. Hoffman. Mr. Hoffman has served a member of our board of directors since October 2018. Currently, Mr. Hoffman serves as Chief Financial Officer and Senior Vice President, Finance of Heron Therapeutics, Inc., a Nasdaq-listed company. In addition, Mr. Hoffman serves as a board member of the following Nasdaq-listed companies: Kura Oncology, Inc. (also serves as the chair of the audit committee), DelMar Pharmaceuticals, Inc. (as the chairman of the board), Aravive, Inc. (also serves as the chair of the audit committee). Prior to joining Heron Therapeutics, Mr. Hoffman served as Executive Vice President and Chief Financial Officer of Innovus Pharmaceuticals, Inc., a public pharmaceutical company, from September 2016 to April 2017. From July 2015 to September 2016, Mr. Hoffman served as Chief Financial Officer of AnaptysBio, Inc., a public biotechnology company. From June 2012 to July 2015, Mr. Hoffman served as the Senior Vice President, Finance and Chief Financial Officer and part of the founding management team of Arena Pharmaceuticals, Inc., or Arena, a public biopharmaceutical company. From August 2011 to June 2012 and previously from December 2005 to March 2011, he served

as Arena's Vice President, Finance and Chief Financial Officer and in a number of various roles of increasing responsibility from 1997 to December 2005. From March 2011 to August 2011, Mr. Hoffman served as Chief Financial Officer for Polaris Group, a biopharmaceutical drug company. Mr. Hoffman formerly served as a member of the board of directors of CombiMatrix Corporation, a molecular diagnostics company, and MabVax Therapeutics Holdings, Inc., a biopharmaceutical company. Mr. Hoffman serves as an advisory committee member of the Financial Accounting Standards Board (FASB). Mr. Hoffman formerly served as a director and President of the San Diego Chapter of Financial Executives International. Mr. Hoffman holds a B.B.A. from St. Bonaventure University, and is licensed as a C.P.A. (inactive) in the State of California.

Family Relationships

There are no family relationships among any of our executive officers or directors.

B. Compensation.

Compensation of Executive Officers and Directors

Incentive Compensation

For the year ended December 31, 2018, the aggregate compensation accrued or paid to the members of our board of directors and our executive officers for services in all capacities was \$3,765,304.

We did not set aside or accrue any amounts for pension, retirement or similar benefits to members of our board of directors or executive officers in the year ended December 31, 2018.

We do not maintain any cash incentive or bonus programs. During the year ended December 31, 2018, we had no performance based compensation programs other than the 2018 SMT Long Term Incentive Plan, or the 2018 LTIP, and the 2017 SMT Long Term Incentive Plan, or the 2017 LTIP. For more information on our Long Term Incentive Plans, see the discussion below under “—Compensation Plans—2017 and 2018 SMT Long Term Incentive Plans.”

Executive Officer Compensation

Equity Awards

We did not grant any share options to our executive officers during the fiscal year ended December 31, 2018.

Employment Agreements with Executive Officers

We have entered into employment agreements with our executive officers. Each of our executive officers is employed for a continuous term unless either we or the executive officer gives prior notice to terminate such employment. We may terminate the employment for just cause, at any time, without notice or remuneration, for certain acts of the executive officer. An executive officer may terminate his or her employment at any time with six months' prior written notice.

Each executive officer has agreed to maintain the confidentiality of any confidential information, both during and after the employment agreement expires or is earlier terminated. In addition, all executive officers have agreed to be bound by a non-solicitation covenant that prohibits each executive officer from contacting or communicating with our customers, members, partners, suppliers or any other persons or entities with whom we do business or soliciting or hiring any of our employees during his or her employment and for one year after the termination of his or her employment and by a non-compete covenant that prohibits each executive officer from competing with us, directly or indirectly, during his or her employment and for six months after the termination of his or her employment.

Option Grants

We have made grants of options to our employees pursuant to our 2014 Employee Share Option Scheme Plan, or the 2014 Plan, and our 2017 Employee Share Option Plan 1, or the 2017 Plan. Options granted pursuant to the 2014 Plan are either vested in full as of the date of grant or are 25% vested as of the date of grant, with the remaining 75% vesting in equal annual installments over the three years following the date of grant. Options granted pursuant to the 2017 Plan vest in full upon the two year anniversary of the date of grant. Vested options may be exercised during their term and for varying periods following termination of service, depending on the reason for termination. Options will be adjusted to account for any changes in capitalization or certain other corporate events and are not transferable (but may be exercised by the individual's heirs in the case of death, to the extent vested at the time of death).

LTIP

On August 23, 2017 and February 1, 2018, we granted 1,462,000 and 104,000 bonus entitlement units to our executive officers pursuant to the 2017 LTIP, respectively. 1,479,334 bonus entitlement units granted under the 2017 LTIP remained outstanding as of December 31, 2018. On July 30, 2018, we granted 241,142 bonus entitlement units to our executive officers pursuant to the 2018 LTIP, all of which remained outstanding as of December 31, 2018.

Upon vesting and redemption, each unit award is converted into a cash payment equal to the number of units multiplied by the per-share fair market value of our ordinary shares on the day following our receipt of a redemption notice. The 1,462,000 bonus entitlement units granted under the 2017 LTIP will be one-third vested each year after the first, second, and third anniversary of the award. The 104,000 bonus entitlement units granted under the 2017 LTIP will be one-half vested each year after the second and third anniversary of the award. The 241,142 bonus entitlement units granted under the 2018 LTIP will be one-third vested each year after the first, second, and third anniversary of the award.

Regarding the Company's 2017 and 2018 LTIPs, the respective quoted fair value of the awards on the grant date was NT\$33.45 (or \$1.10) and \$7.90, based on the Taiwan share price on August 23, 2017 and the closing price per ADS on July 30, 2018, respectively. The quoted fair value on the reporting date is based on the closing price of Taiwan share price of NT\$33.20 (or \$1.12) as of December 31, 2017 and the closing price per ADS of \$3.60 as of December 31, 2018, respectively.

We recognized total expenses of \$838,677 with respect to the LTIPs for the year ended December 31, 2018.

Other Programs

We have adopted defined contribution plans which are post-employment benefit plans under which we pay fixed contributions into the Singapore Central Provident Fund on a mandatory basis. We have no further payment obligations once the contributions have been paid. The contributions are recognized as employee compensation expense when they are due.

ASLAN Pharmaceuticals Taiwan Limited adopted a pension plan under the Labor Pension Act, or the LPA, which is a state-managed defined contribution plan. Under the LPA, ASLAN Pharmaceuticals Taiwan Limited makes monthly contributions to its Taiwan-based employees' individual pension accounts at 6% of monthly salaries and wages.

ASLAN Pharmaceuticals (Shanghai) Co. Ltd. makes monthly contributions at a certain percentage of its Shanghai-based employees' payroll expenses to pension accounts, which are operated by the Chinese government.

Director Compensation

We provide only cash compensation to each of our non-executive directors not serving as a representative of a shareholder for the time and effort necessary to serve as a member of our board of directors. The compensation of the non-executive directors complies with our Articles and is determined by our remuneration committee and board of directors as a whole, based on a review of individual contributions to our operations and current practices in other companies.

2018 Director Compensation Table

The following table sets forth information regarding the compensation earned by our non-executive directors for service on our board of directors during the year ended December 31, 2018.

Name	Fees Earned in Cash	All Other Compensation	Total
Abel Ang (representing Advanced MedTech Technologies Pte Ltd.)	\$ —	\$ —	\$ —
Jun Wu, Ph.D. (representing Alnair Investment)	\$ —	\$ —	\$ —
Lim Chin Hwee Damien (representing BV Healthcare II Pte Ltd.)	\$ —	\$ —	\$ —
Jerome Shen, Ph.D.	\$ 25,000	\$ —	\$ 25,000
Andrew Howden	\$ 30,000	\$ —	\$ 30,000
Kelvin Sun	\$ 30,000	\$ —	\$ 30,000
Mei-Shu Lai, Ph.D., M.D.	\$ 25,000	\$ —	\$ 25,000
Robert E. Hoffman.	\$ 12,500	\$ —	\$ 12,500

(1) Dr. Shen resigned from our board of directors on October 30, 2018.

(2) Dr. Lai resigned from our board of directors on October 30, 2018.

(3) Mr. Hoffman joined our board of directors on October 30, 2018.

We have not granted any options or issued any shares of restricted stock to our non-executive directors.

Grants of Share Options to Executive Officers

The following table summarizes, as of the date of this Annual Report, outstanding share options to purchase ordinary shares granted to our executive officers. We have not granted any share options to our non-executive directors.

Name	Grant Date	Number of Shares Underlying Stock Option	Exercise Price per Share	Stock Option Expiration Date
Carl Firth, Ph.D.	July 1, 2010	300,000	\$ 0.10	July 1, 2020
	July 1, 2010	150,000	\$ 0.40	July 1, 2020
	July 1, 2011	180,000	\$ 0.10	July 1, 2021
	July 1, 2011	225,000	\$ 0.40	July 1, 2021
	July 1, 2012	295,500	\$ 0.40	July 1, 2022
	July 1, 2013	4,500	\$ 0.40	July 1, 2023
	July 1, 2013	300,000	\$ 0.68	July 1, 2023
	July 1, 2014	300,000	\$ 0.68	July 1, 2024
	July 1, 2015	150,000	\$ 0.68	July 1, 2025
	July 1, 2015	1,050,000	\$ 0.94	July 1, 2025
	July 1, 2016	300,000	\$ 1.13	July 1, 2026
Mark McHale, Ph.D	July 1, 2010	120,000	\$ 0.40	July 1, 2020
	July 1, 2011	60,000	\$ 0.10	July 1, 2021
	July 1, 2011	180,000	\$ 0.40	July 1, 2021
	July 1, 2012	240,000	\$ 0.40	July 1, 2022
	July 1, 2013	240,000	\$ 0.68	July 1, 2023
	July 1, 2014	240,000	\$ 0.68	July 1, 2024
	July 1, 2015	120,000	\$ 0.68	July 1, 2025
	July 1, 2015	840,000	\$ 0.94	July 1, 2025
July 1, 2016	240,000	\$ 1.13	July 1, 2026	
Ben Goodger	July 1, 2016	276,000	\$ 1.13	July 1, 2026
Kiran Asarpota	July 1, 2010	60,000	\$ 0.40	July 1, 2020
	July 1, 2011	60,000	\$ 0.40	July 1, 2021
	July 1, 2012	60,000	\$ 0.40	July 1, 2022
	July 1, 2013	60,000	\$ 0.68	July 1, 2023
	July 1, 2014	60,000	\$ 0.68	July 1, 2024
	July 1, 2015	40,000	\$ 0.68	July 1, 2025
	July 1, 2015	40,000	\$ 0.94	July 1, 2025
	July 1, 2016	120,000	\$ 1.13	July 1, 2026

Compensation Plans

2014 Employee Share Option Scheme Plan

We maintain the 2014 Plan, pursuant to which we have granted share options to our employees, directors and consultants. The 2014 Plan became effective on August 26, 2014, and has a term of ten years. After the effective date of the 2017 Plan, no additional awards were granted, and no future awards are allowed to be granted, under the 2014 Plan.

The 2014 Plan may be administered by our board of directors or a committee thereof, which administrator has the authority to: determine the individuals to whom awards may be granted and the terms of such awards; amend the terms of any outstanding award, provided that the consent of the grantee is required where the grantee's rights would be adversely affected; construe and interpret the terms of the 2014 Plan and awards granted thereunder; and take such other action, not inconsistent with the terms of the 2014 Plan, as it deems appropriate.

The number of shares under the 2014 Plan and under outstanding awards, and the exercise price of outstanding awards, will be adjusted to reflect certain changes in capitalization. In the event of a corporate transaction (as defined in the 2014 Plan), awards will terminate if not assumed. If they are assumed, the awards will fully vest if the holder's employment is terminated without cause or the holder resigns for good reason, in either case within 12 months thereafter.

2017 Employee Share Option Plan 1

We maintain the 2017 Plan, pursuant to which we may grant share options. The 2017 Plan became effective on September 13, 2017, and has a term of ten years. Awards under the 2017 Plan may be granted to our employees. The maximum aggregate number of shares that may be issued under the plan is 1,000,000 shares.

The 2017 Plan is administered by our board of directors, which has the authority to determine the individuals to whom awards may be granted and the terms of such awards; and to construe and interpret the terms of the 2017 Plan and awards granted thereunder.

The number of shares under the 2017 Plan and under outstanding awards, and the exercise price of outstanding awards, will be adjusted to reflect certain changes in capitalization. In the event of a corporate transaction (as defined in the 2017 Plan), awards will terminate if not assumed. If they are assumed, the awards will vest if the holder's employment is terminated without cause or the holder resigns, in either case within 12 months thereafter. In the event of a change in control (as defined in the 2017 Plan) that is not a corporate transaction, awards will fully vest if the holder's employment is terminated without cause or the holder resigns, in either case within 12 months thereafter.

2017 and 2018 SMT Long Term Incentive Plans

We maintain the 2017 and 2018 LTIPs, pursuant to which we may grant bonus entitlement unit awards. The 2017 LTIP and 2018 LTIP became effective on August 23, 2017 and July 30, 2018, respectively, and each has a term of ten years. Awards under each LTIP may be granted to our employees. All of the awards granted in 2017 and 2018 were granted to our executive officers.

Each LTIP is administered by the members of the remuneration committee, which committee has the authority to: determine the individuals to whom unit awards may be granted and the terms of such unit awards; amend the terms of any outstanding unit award, provided that the consent of the grantee is required where the grantee's rights would be adversely affected; construe and interpret the terms of each LTIP and unit awards granted thereunder; and take such other action, not inconsistent with the terms of each LTIP, as it deems appropriate.

Upon vesting and redemption, each unit award is converted into a cash payment equal to the number of units multiplied by the per-share fair market value of our ordinary shares on the day following our receipt of a redemption notice, up to a cap of five times the base value of the unit as set forth in the grantee's award agreement. Redemption occurs automatically upon termination of employment and upon the per-share fair market value exceeding five times the base value of the unit award, to the extent not previously redeemed.

The terms of awards will be adjusted to reflect certain changes in capitalization. In the event of a corporate transaction (as defined in each LTIP), awards will terminate if not assumed. If they are assumed, the awards will vest and be redeemed if the holder's employment is terminated without cause or the holder resigns for good reason, in either case within 12 months thereafter. In the event of a change in control (as defined in each LTIP) that is not a corporate transaction, awards will fully vest if the holder's employment is terminated without cause or the holder resigns for good reason, in either case within 12 months thereafter.

Insurance and Indemnification

We are empowered by our Articles to indemnify our directors against any liability they incur by reason of their directorship. We maintain directors' and officers' insurance to insure such persons against certain liabilities. In addition, our employment agreements with our executive officers provide for indemnification. We have entered into an indemnification agreement with each of our directors and executive officers.

In addition to such indemnification, we provide our directors and executive officers with directors' and officers' liability insurance as permitted by our Articles.

Insofar as indemnification of liabilities arising under the Securities Act may be permitted to our board, executive officers, or persons controlling us pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

C. Board practices.

Composition of our Board of Directors

Our board of directors is currently composed of seven members. Our board of directors has determined that, of our seven directors, three do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of director and that each of these directors is "independent" as that term is defined under the Taiwan Securities and Exchange Act, or the Taiwan Act. According to the Taiwan Act, during the two years before being elected and during the term of office, none of our independent directors may have been or be any of the following, which we refer to as a Restricted Person:

1. An employee of ours or any of our affiliates;
2. Our statutory auditor or of our affiliates;
3. A director of our affiliates, unless he or she was an independent director of our subsidiary;

4. A natural-person shareholder who holds in the aggregate, together with his or her spouse, minor children, and his or her nominees, one percent or more of our ordinary shares outstanding or ranks among the top ten in our shareholdings;
5. A spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship, of any of the persons in the preceding four items;
6. A director, statutory auditor, or employee of a corporate shareholder that directly holds five percent or more of our total number of shares outstanding or of a corporate shareholder that ranks among the top five in our shareholdings;
7. A director, statutory auditor, officer, or shareholder holding five percent or more of the shares of a company or institution that meets certain statutorily specified criteria and has a financial or business relationship with us; or
8. A professional individual who, or an owner, partner, director, statutory auditor, or officer of a sole proprietorship, partnership, company, or institution that, provides commercial, legal, financial, accounting services or consultation to us or to any of our affiliates, or a spouse thereof; provided that this restriction does not apply to a member of the remuneration committee, public tender offer review committee, or special committee for merger/consolidation and acquisition, who exercises powers pursuant to the Taiwan Act or to the Taiwan Business Mergers and Acquisitions Act or related laws or regulations.

The “during the two years before being elected” requirement does not apply when an independent director of ours has served as an independent director of our or any of our affiliates, or of a specific company or institution that has a financial or business relationship with us, as stated in items 3 or 7 above, but is currently no longer in that position.

In accordance with our Articles, our directors serve for a term of three years and, at the expiration of such term, are eligible for reelection by our shareholders. If a new director is not elected after the expiration of the tenure of an existing director, the tenure of such out-going director shall be extended until a new director has been elected.

Duties of Directors

Under Cayman Islands law, all of our directors owe us fiduciary duties, including a duty of loyalty, a duty to act honestly and a duty to act in good faith and in a manner they believe to be in our best interests. Our directors also have a duty to exercise the skill they actually possess and such care and diligence that a reasonably prudent person would exercise in comparable circumstances. In fulfilling their duty of care to us, our directors must ensure compliance with our Articles, as amended and restated from time to time. We have the right to seek damages if we suffer loss as a consequence of a duty owed by any of our directors being breached.

Committees of our Board of Directors

Our board of directors has three standing committees: an audit committee, a remuneration committee and a nomination committee.

Audit Committee

The audit committee, which consists of Mr. Howden, Mr. Hoffman and Mr. Sun, assists the board of directors in overseeing our accounting and financial reporting processes and the audits of our financial statements. Mr. Sun serves as chairman of the audit committee. The audit committee consists exclusively of independent members of our board. Our board of directors has determined that Kelvin Sun qualifies as an “audit committee financial expert” as defined by applicable SEC rules and has the requisite financial sophistication as defined under the applicable Nasdaq rules and regulations. Our board has determined that all of the members of the audit committee satisfy the “independence” requirements set forth in Rule 10A-3 under the Exchange Act. The audit committee will be governed by a charter that complies with Nasdaq rules.

The audit committee’s responsibilities will include:

- the adoption of or amendments to the internal control system;
- assessment of the effectiveness of the internal control system;
- the adoption or amendment, of the procedures for handling financial or business activities of a material nature such as acquisition or disposal of assets, derivatives trading, lending of funds to others and endorsements or guarantees for others;
- matters in which a director is an interested party;
- asset transactions or derivatives trading of a material nature;
- loans of funds, endorsements or provision of guarantees of a material nature;
- the offering, issuance or private placement of equity-type securities;
- the hiring or dismissal of a certified public accountant or their compensation;
- the appointment or discharge of a financial, accounting or internal audit officer;
- annual and semi-annual financial reports; and
- other material matters as may be required by us or by the competent authority.

The audit committee will meet as often as one or more members of the audit committee deem necessary, but in any event will meet at least four times per year according to the Taiwan Act.

Remuneration Committee

The remuneration committee, which consists of Mr. Howden, Mr. Hoffman and Mr. Sun, assists the board of directors in determining executive officer compensation. Mr. Howden serves as chairman of the remuneration committee. Under the Taiwan Act, our remuneration committee shall be comprised of at least three members, and at least one of them shall be an independent member of the board as defined under the Taiwan Act. All members of our remuneration committee are independent members of the board as defined by the Taiwan Act. In addition, during the two years before being appointed to his or her term of office, none of our remuneration committee members may have been or be a Restricted Person. This “during the two years before being appointed” requirement does not apply where a remuneration committee member has served as an independent director of ours or any of our affiliates, or of a specified company or institution that has a financial or business relationship with us, as stated in items 3 or 7 of the definition of Restricted Person above, but is currently no longer in that position. Under SEC and Nasdaq rules, there are heightened independence standards for members of the remuneration committee, including a prohibition against the receipt of any compensation from us other than standard board member fees. Although foreign private issuers are not required to meet this heightened standard, all of our remuneration committee members meet this heightened standard.

The remuneration committee's responsibilities include:

- professionally and objectively evaluate the policies and systems for compensation of the directors, supervisors, and managerial officers of us, and submit recommendations to the board of directors for its reference in decision making;
- establishing and periodically reviewing the annual and long-term performance goals for the directors and managerial officers of us and the policies, systems, standards, and structure for their compensation;
- periodically assessing the degree to which performance goals for the directors and managerial officers of us have been achieved, and setting the types and amounts of their individual compensation; and
- periodically review the charter and propose suggestion for amendments.

When performing these responsibilities, the remuneration committee shall follow the following principles:

- ensuring that the compensation arrangements of us comply with applicable laws and regulations and are sufficient to recruit outstanding talent;
- performance assessments and compensation levels of the directors and managerial officers shall take into account the general pay levels in the industry, the time spent by the individual and their responsibilities, the extent of goal achievement, their performance in other positions, and the compensation paid to employees holding equivalent positions in recent years. Also to be evaluated are the reasonableness of the correlation between the individual's performance and our operational performance and future risk exposure, with respect to the achievement of our short-term and long-term business goals and the financial position;
- there shall be no incentive for the directors or managerial officers to pursue compensation by engaging in activities that exceed the our tolerable risk level;
- for directors and senior managerial officers, the percentage of bonuses to be distributed based on their short-term performance and the time for payment of any variable compensation shall be decided with regard to the characteristics of the industry and the nature of our business; and
- no member of the committee may participate in discussion and voting when the committee is deciding on that member's individual compensation.

The remuneration committee shall submit its recommendations regarding the above for deliberation to the board. When deliberating the recommendation of the remuneration committee, the board shall give comprehensive consideration to matters including the amounts of remuneration, payment methods, and the potential future risk facing our company. If the board would like to decline to adopt, or would like to modify, a recommendation of the remuneration committee, the consent of a majority of the directors in attendance at a meeting attended by two-thirds or more of the entire board is required, and the board in its resolution shall provide its comprehensive consideration and shall specifically explain whether the remuneration passed by it exceeds in any way the remuneration recommended by the remuneration committee.

Nomination Committee

The nomination committee, which consists of Mr. Howden, Mr. Sun, Mr. Ang and Dr. Firth, assists the board of directors in selecting and approving director candidates to serve on the board. Under the Taiwan Act, all companies listed on the TPEX are required to adopt a director candidate nomination mechanism for the election of directors, although there is no requirement that a listed company form a nomination committee. Under SEC and Nasdaq rules, director nominees must either be selected, or recommended for

the board's selection, either by independent directors constituting a majority of the board's independent directors in a vote in which only independent directors participate, or by a nomination committee comprised solely of independent directors. Foreign private issuers are not required to have independent director oversight of director nominations, and out of those currently serving on our nomination committee, only Mr. Howden and Mr. Sun are independent members of our board.

The nomination committee's responsibilities include:

- reviewing and assessing the composition of the board of directors;
- identifying appropriate director candidates and independent director candidates;
- reviewing the qualifications and suitability of each director candidate and independent director candidate identified by the committee;
- submitting director and independent director recommendations to the board of directors for consideration; and
- conducting all other necessary actions to facilitate the selection and approval of director candidates and independent director candidates by the board.

The nomination committee shall submit its recommendations regarding the above for deliberation to the board. When deliberating with respect to the recommendation of the nomination committee, the board shall give comprehensive consideration to matters including the current composition of the board, the qualifications of director candidates, the overall diversity of the board and the need for refreshing. The nomination committee will meet as often as one or more members of the nomination committee deem necessary.

Code of Business Conduct and Ethics

We have adopted a Code of Business Conduct and Ethics that covers a broad range of matters including the handling of conflicts of interest, compliance issues and other corporate policies. Our Code of Business Conduct is applicable to both our directors and employees.

Other Corporate Governance Matters

The Sarbanes-Oxley Act of 2002, as well as related rules subsequently implemented by the SEC, requires foreign private issuers, including our company, to comply with various corporate governance practices. In addition, Nasdaq rules provide that foreign private issuers may follow home country practice in lieu of the Nasdaq corporate governance standards, subject to certain exceptions and except to the extent that such exemptions would be contrary to U.S. federal securities laws.

Because we are a foreign private issuer, our members of our board of directors, executive board members and senior management are not subject to short-swing profit and insider trading reporting obligations under section 16 of the Exchange Act. They will, however, be subject to the obligations to report changes in share ownership under section 13 of the Exchange Act and related SEC rules.

D. Employees.

As of December 31, 2018, we had 56 full-time employees. Of these, 28 were engaged in full-time research and development and 28 were engaged in full-time general and administrative functions. By geography, 37 of our employees are located in Singapore, 15 are located in Taiwan, and 4 are located in China.

We have also engaged and may continue to engage independent contractors to assist us with our operations. None of our employees are represented by a labor union or covered by a collective bargaining agreement. We have never experienced any employment related work stoppages, and we consider our relations with our employees to be good.

	As of December 31,		
	2016	2017	2018
Function:			
Research and development	21	23	28
General and administrative	17	24	28
Total	<u>38</u>	<u>47</u>	<u>56</u>

E. Share ownership.

For information regarding the share ownership of our directors and executive officers, see “Item 6.B-Compensation” and “Item 7.A-Major Shareholders.”

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

The following table sets forth information with respect to the beneficial ownership of our ordinary shares as of March 31, 2019 for:

- each beneficial owner of 5% or more of our outstanding ordinary shares determined as of March 31, 2019, which was the most recent record date of our ordinary shares under applicable procedures in Taiwan (upon which basis we are able to ascertain whether or not a holder otherwise not affiliated with us may be above the 5% threshold);
- each of our executive officers and directors; and
- all of our executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities and include ordinary shares issuable upon the exercise of options that are immediately exercisable or exercisable within 60 days of March 31, 2019. Percentage ownership calculations are based on 160,248,940 ordinary shares outstanding as of March 31, 2019.

As of October 1, 2018, to the best of our knowledge, approximately 32,058,513 ordinary shares (including ordinary shares in the form of ADSs), or 20.0% of our outstanding ordinary shares as of such date, were held by nine shareholders of record in the United States. The actual number of holders is greater than these numbers of record holders and includes beneficial owners whose ordinary shares or ADSs are held in street name by brokers and other nominees. This number of holders of record also does not include holders whose shares may be held in trust by other entities.

Except as otherwise indicated, all of the shares reflected in the table are ordinary shares and all persons listed below have sole voting and investment power with respect to the shares beneficially owned by them, subject to applicable community property laws. The information is not necessarily indicative of beneficial ownership for any other purpose. None of our major shareholders have different voting rights with respect to their ordinary shares. We have set forth below information known to us regarding any significant change in the percentage ownership of our ordinary shares by any major shareholders during the past three years.

Except as otherwise indicated in the table below, addresses of the directors, executive officers and named beneficial owners are in care of ASLAN Pharmaceutical Limited, 83 Clemenceau Avenue #12-03 UE Square, Singapore 239920 and our telephone number is +65 6222 4235.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
5% or Greater Shareholders:		
Alnair Investment ⁽¹⁾	9,887,358	6.2%
Executive Officers and Directors:		
Carl Firth, Ph.D. ⁽²⁾	6,662,340	4.1%
Mark McHale, Ph.D. ⁽³⁾	3,711,915	2.3%
Ben Goodger ⁽⁴⁾	376,000	*
Kiran Asarpota ⁽⁵⁾	586,996	*
Stephen Doyle ⁽⁶⁾	—	—
Advanced Medtech Holdings Pte Ltd. (represented by Abel Ang) ⁽⁷⁾	2,127,660	1.3%
Alnair Investment (represented by Jun Wu, Ph.D.) ⁽⁸⁾	9,887,358	6.2%
BV Healthcare II Pte Ltd. (represented by Lim Chin Hwee Damien) ⁽⁹⁾	7,542,112	4.7%
Robert E. Hoffman ⁽¹⁰⁾	—	—
Andrew Howden ⁽¹¹⁾	439,510	*
Kelvin Sun	—	—
All current executive officers and directors as a group (11 persons) ⁽¹²⁾	31,333,891	18.8%

* Represents beneficial ownership of less than one percent.

(1) Consists of 8,823,528 ordinary shares held by Alnair Investment, or Alnair, and 1,063,830 ordinary shares held by Shanghai Cenova Innovation Venture Fund L.P., or Shanghai Cenova. Alnair is wholly owned and controlled by Shanghai Cenova. Shanghai Cenova Bioventure Equity Investment Fund Management Enterprise L.P., or Shanghai Cenova Bioventure, is the general partner of Shanghai Cenova. Shanghai Cenova Bioventure is owned and controlled by Dr. Wu, a member of our board of directors. As such, Dr. Wu may be deemed to have sole voting and dispositive power with respect to the shares held by Alnair and Shanghai Cenova. The addresses for Alnair and Shanghai Cenova are P.O. Box 2075, George Town, Grand Cayman KY1-1105, Cayman Islands and No. 53 Gao You Road, Shanghai, China 200031, respectively.

- (2) Consists of (A) ADSs representing 63,000 ordinary shares held by Dr. Firth, (B) 3,344,340 ordinary shares held by Kimba Capital Limited, or Kimba Capital, and (C) 3,255,000 ordinary shares issuable upon the exercise of share options granted to Dr. Firth that are exercisable within 60 days of March 31, 2019. Dr. Firth is director of Kimba Capital and has sole voting and dispositive power with respect to the shares held by Kimba Capital. As such, Dr. Firth may be deemed to be a beneficial owner of shares held by Kimba Capital.
- (3) Consists of (A) 1,431,915 ordinary shares held by Match Point Developments Limited, or Match Point and (B) 2,280,000 ordinary shares issuable upon the exercise of share options granted to Dr. McHale that are exercisable within 60 days of March 31, 2019. Dr. McHale is director of Match Point and has sole voting and dispositive power with respect to the shares held by Match Point. As such, Dr. McHale may be deemed to be a beneficial owner of shares held by Match Point.
- (4) Consists of (A) 100,000 ordinary shares and (B) 276,000 ordinary shares issuable upon the exercise of share options granted to Mr. Goodger that are exercisable within 60 days of March 31, 2019.
- (5) Consists of (A) 86,996 ordinary shares held by Mr. Asarpota and (B) 500,000 ordinary shares issuable upon the exercise of share options granted to Mr. Asarpota that are exercisable within 60 days of March 31, 2019.
- (6) Mr. Doyle joined our senior management team as of February 1, 2018 and does not beneficially own any of our ordinary shares as of March 31, 2019.
- (7) Consists of 2,127,660 ordinary shares held by Advanced Medtech Holdings Pte Ltd., or AMT. Mr. Ang is as a member of our board of directors and serves in such capacity as a representative of AMT. Mr. Ang is also a director of AMT. As such, Mr. Ang may be deemed to be a beneficial owner of shares held by AMT. While the directors of AMT have voting and dispositive power over the shares held by AMT, none of them has a pecuniary interest therein. Accordingly, Mr. Ang disclaims beneficial ownership of such shares
- (8) Consists of the shares described in footnote (1) above. Dr. Wu is a member of our board of directors and serves in such capacity as a representative of Alnair. Dr. Wu is also a director of Alnair, general manager of Shanghai Cenova and owns and controls Shanghai Cenova Bioventure, the general partner of Shanghai Cenova. As such, Dr. Wu may be deemed to be a beneficial owner of shares held by Alnair and Shanghai Cenova.
- (9) Consists of 7,542,112 ordinary shares held by BV Healthcare II Pte Ltd., or BV Healthcare. BioVeda Capital Singapore Pte Ltd, or BioVeda, is the investment manager of BV Healthcare. An investment committee of BV Healthcare, which includes Mr. Lim, or the BV Investment Committee, reviews and approves investment and divestment proposals submitted by BioVeda. As such, the BV Investment Committee may be deemed to have voting and dispositive power with respect to the shares held by BV Healthcare. The address for BV Healthcare is 50 Cuscaden Road #08-01 HPL House, Singapore 249724. Mr. Lim is a member of our board of directors and serves in such capacity as a representative of BV Healthcare. Mr. Lim is also a director of BV Healthcare and on the BV Investment Committee. As such, Mr. Lim may be deemed to be a beneficial owner of shares held by BV Healthcare.
- (10) Mr. Hoffman joined our board of directors as of October 30, 2018 and does not beneficially own any of our ordinary shares as of March 31, 2019.
- (11) Consists of 439,510 ordinary shares held by Mr. Howden.
- (12) Consists of the shares referenced in footnotes (2) — (11) above.

B. Related party transactions.

Since January 1, 2018, we have engaged in the following transactions with our directors, executive officers or holders of more than 5% of our outstanding share capital and their affiliates, which we refer to as our related parties.

Agreements with Our Executive Officers and Directors

We have entered into employment agreements with our executive officers and director compensation agreements with our non-executive directors. These agreements contain customary provisions and representations, including confidentiality, non-competition and non-solicitation undertakings by the executive officers. However, the enforceability of the non-competition provisions may be limited under applicable law.

Related Party Transaction Policy

We have adopted a related party transaction policy, which requires that certain related party transactions be approved by our board of directors and audit committee. We intend to afford ourselves of the Nasdaq foreign private issuer exemption from the requirement that our audit committee have review and oversight over all “related party transactions,” as defined in Item 7.B of Form 20-F. The definition of “related party transactions” per our related party transaction policy and ROC law is not as broad as the definition in Item 7.B of Form 20-F.

Indemnification Agreements

We have entered into, and intend to continue to enter into, separate indemnification agreements with our directors and executive officers. These indemnification agreements provide our directors and executive officers with contractual rights to indemnification and, in some cases, expense advancement in any action or proceeding arising out of their services as one of our directors or executive officers or as a director or executive officer of any other company or enterprise to which the person provides services at our request.

C. Interests of experts and counsel.

Not applicable.

Item 8. Financial Information

The purpose of this standard is to specify which financial statements must be included in the document, as well as the periods to be covered, the age of the financial statements and other information of a financial nature.

A. Consolidated Statements and Other Financial Information.

Our consolidated financial statements are appended at the end of this Annual Report, starting at page F-1, and are incorporated herein by reference.

Dividend Policy

The holders of our ordinary shares are entitled to receive such dividends as may be declared by an ordinary resolution and subject to our Articles and the Companies Law. Under Cayman Islands law, dividends may be paid only out of profits, which include net earnings and retained earnings undistributed in prior years, and out of share premium, a concept analogous to paid-in surplus in the United States. No dividend may be declared and paid unless our directors determine that immediately after the payment, we will be able to satisfy our liabilities as they become due in the ordinary course of business and we have funds lawfully available for such purpose. We are not permitted to pay any dividends or bonuses if (i) we do not have earnings or (ii) we have not yet covered our losses. Our Articles set out further detailed provisions dealing with how we may fund, create reserves for and pay dividends.

Any dividends will be paid to the custodian of the ADSs that were issued in our public offering and shall be subject to further distribution to you as a beneficial owner of the underlying ordinary shares by the custodian.

Legal Proceedings

From time to time, we may be involved in legal proceedings or be subject to claims arising out of our operations. We are not currently a party to any legal proceedings that in the opinion of our management, would have a material adverse effect on our business.

B. Significant Changes.

Not applicable.

Item 9. The Offer and Listing.

A. Offer and listing details.

Our ADSs began trading on The Nasdaq Global Market on May 4, 2018 under the trading symbol “ASLN”. Prior to that date, there was no public trading market for our ADSs. Our ordinary shares have been trading on the TPEX under “6497” since June 1, 2017. Prior to that date, there was no public trading market for our ordinary shares.

B. Plan of distribution.

Not applicable.

C. Markets.

Our ADSs began trading on The Nasdaq Global Market on May 4, 2018 under the trading symbol “ASLN”. Our ordinary shares have been trading on the TPEX under “6497” since June 1, 2017.

D. Selling shareholders

Not applicable.

E. Dilution.

Not applicable.

F. Expenses of the issue.

Not applicable.

Item 10. Additional Information.

A. Share capital.

Not applicable.

B. Memorandum and articles of association.

Sixth Amended and Restated Memorandum and Articles of Association

Subject to other provisions in our Articles, our shareholders may by ordinary resolution increase our authorized share capital or by special resolution reduce the share capital and may also by special resolution amend our Articles.

Ordinary Shares

General

All of our outstanding ordinary shares are fully paid and non-assessable. No certificates representing the ordinary shares have been issued. The ordinary shares are not entitled to any preemptive conversion or redemption rights at the sole option of the holder of ordinary shares. Our shareholders may freely hold and vote their shares (subject to certain restrictions such as the number of proxies that may be held by a shareholder at a general meeting).

Pre-emptive Rights

When we issue new shares for cash consideration, our board of directors may reserve 10% to 15% of the new shares for subscription by our employees or of any of our subordinate companies, as determined by our board of directors in its reasonable discretion. Subject to several statutory exceptions, our shareholders are entitled to subscribe for the remainder of the new shares in proportion to their existing shareholdings. New shares not so subscribed by our employees and shareholders may be offered by us to the public or to specific persons designated by the board.

Since our shares are publicly traded on the TPEx, in the event of offering new shares for cash, we are also mandatorily required to offer 10% of the shares to the public at the market price, subject to a higher public offering percentage adopted by our shareholders at a shareholders' meeting. The new shares underlying the ADSs to be issued in this offering are not subject to the shareholders' pre-emptive right as such pre-emptive rights have been waived by our shareholders at the shareholders meeting held on October 30, 2018.

Repurchase Rights

For so long as the shares are registered in Taiwan, the repurchase of our own shares by us shall be approved by our board of directors in compliance with Regulations Governing Share Repurchase by Exchange-Listed and OTC-Listed Companies and relevant laws of the Cayman Islands. We may with the sanction of an ordinary resolution of the shareholders' meeting purchase and cancel our own shares out of our share capital. The number of shares to be repurchased and cancelled pursuant to our Articles shall be pro rata among our shareholders in proportion to the number of shares held by each such shareholder. The number of shares purchased by us pursuant to our Articles shall not exceed 10% of the total number of our issued shares. The total price of the shares so purchased shall not exceed the sum of retained earnings plus the premium paid on the issuance of any share and income from endowments received by us.

The amount payable to the shareholders in connection with a repurchase of shares out of our share capital may be paid in cash or by way of delivery of assets in specie. The assets to be delivered and the amount of such substitutive share capital in connection with a repurchase of shares out of our share capital shall be approved by the shareholders at the general meeting and shall be subject to consent by the shareholder receiving such assets. Prior to the aforementioned general meeting considering such repurchase, our board of directors shall have the value of assets to be delivered and the amount of such substitutive share capital in respect of repurchase of the shares audited and certified by a Taiwan certified public accountant.

Voting Rights

Each ordinary share is entitled to one vote. Voting at any meeting of shareholders is by a poll. Our Articles list a number of matters that must be approved by the shareholders by Supermajority Resolution (as defined below). Other matters to be approved by shareholders will be decided either by special resolution (where required by law) or by ordinary resolution. Written resolutions of shareholders in lieu of a meeting are not permitted by our Articles.

A quorum required for a meeting of shareholders consists of at least a number of shareholders present in person or by proxy and entitled to vote representing the holders of more than one-half of all of our issued voting share capital. Shareholders' meetings are held annually and may otherwise be convened by our board of directors on its own initiative. Shareholders' meetings shall also be convened on the requisition in writing of any shareholder or shareholders holding at least three percent of the issued voting share capital for one year or longer, subject to certain procedural requirements. Advance notice of at least 30 calendar days is required for convening the annual general meeting and at least 15 calendar days' notice is required for convening extraordinary general meetings.

Any ordinary resolution to be made by our shareholders requires the affirmative vote of a simple majority of the votes attaching to the ordinary shares cast in person or by proxy at a meeting of our shareholders. A special resolution requires the affirmative vote of not less than two-thirds of the votes cast in person or by proxy at a meeting of our shareholders. A special resolution is required for certain matters specified in the Companies Law as requiring approval by special resolution, including appointing a voluntary liquidator, changing our name, reducing our authorized share capital and amending our Articles and for other matters such as issuing preferred shares, transferring treasury shares at a discount to employees or subordinate companies and approving the redemption terms of any preferred shares.

A "Supermajority Resolution" is defined in our Articles as a resolution adopted by a majority vote of the shareholders at a general meeting attended by shareholders who represent two-thirds or more of our total outstanding shares or, if the total number of shares represented by the shareholders present at the general meeting is less than two-thirds of our total outstanding shares, but more than one-half of our total outstanding shares, means instead, a resolution adopted at such general meeting by the shareholders who represent two-thirds or more of the total number of shares entitled to vote on such resolution at such general meeting. Among other things, approval by Supermajority Resolution is required for us to: (i) enter into, amend, or terminate any contract for lease of its business in whole, or for entrusting business, or for regular joint operation with others, (ii) transfer the whole or any material part of its business or assets, (iii) take over the transfer of another's whole business or assets, which will have a material effect on our business operation, (iv) effect any merger (subject to certain structural exceptions) or spin-off of the company in accordance with applicable listing rules, (v) grant waiver to a director engaging in any business within the scope of our business, (vi) discharge or remove a director, (vii) capitalize an amount standing to the credit of reserves or authorize the payment of dividends out of a reserve fund and (viii) issue any employee share options at a discount. In addition, any merger, transfer of business and assets, share swap or other transaction that results in our shares ceasing to be listed on the TWSE or TPEX must be approved by the shareholders representing at least two-thirds of our issued shares.

Subject to certain exceptions specified in our Articles, when a person who acts as the proxy for two or more shareholders at a general meeting, the number of votes represented by him shall not exceed three percent of the total number of votes of the company and the portion of excessive votes represented by such proxy will not be counted.

Dividends

The holders of our ordinary shares are entitled to receive such dividends as may be declared by an ordinary resolution and subject to our Articles and the Companies Law. Under Cayman Islands law, dividends may be paid only out of profits, which include net earnings and retained earnings undistributed in prior years, and out of share premium, a concept analogous to paid-in surplus in the United States. No dividend may be declared and paid unless our directors determine that immediately after the payment, we will be able to satisfy our liabilities as they become due in the ordinary course of business and we have funds lawfully available for such purpose. We are not permitted to pay any dividends or bonuses if (i) we do not have earnings or (ii) we have not yet covered our losses. Our Articles set out further detailed provisions dealing with how we may fund, create reserves for and pay dividends.

Any dividends will be paid to the custodian of the ADSs being issued in this offering and shall be subject to further distribution to you as a beneficial owner of the underlying ordinary shares by the custodian. See “Description of American Depositary Shares—Dividends and Other Distributions.”

Liquidation

If we were to be liquidated and the assets available for distribution among our shareholders are insufficient to repay the whole of the share capital, such assets shall be distributed so that, as nearly as may be, the losses shall be borne by our shareholders in proportion to the number of the ordinary shares held by them. If in a winding up the assets available for distribution among our shareholders shall be more than sufficient to repay the whole of the share capital at the commencement of the liquidation, the surplus shall be distributed among our shareholders in proportion to the number of the ordinary shares held by them at the commencement of the liquidation, subject to a deduction from those ordinary shares in respect of which there are monies due, of all monies payable to us, without prejudice to the rights of the holders of ordinary shares issued upon special terms and conditions.

If we were to be liquidated, the liquidator may, with the approval by a special resolution of our shareholders (and any other approvals as may be required by applicable listing rules), divide among our shareholders in species or in kind the whole or any part of our assets (whether they shall consist of property of the same kind or not) and may, for such purpose set such value as he/she deems fair upon any property to be divided and may determine how such division shall be carried out as between the shareholders or different classes of shareholders. The liquidator may, with the approval by an ordinary resolution of our shareholders, vest the whole or any part of such assets in trustees upon such trusts for the benefit of the contributories as the liquidator, with the approval by an ordinary resolution of our shareholders shall think fit, but so that no shareholder shall be compelled to accept any shares or other securities whereon there is any liability.

Transfer of Shares

Subject to the restrictions of our Articles and applicable ROC laws, as applicable, any of our shareholders may transfer all or any of his or her ordinary shares by an instrument of transfer in the usual or common form or any other form approved by our board, provided that certain transfer restrictions apply to shares issued to our employees and subordinate companies. Subject to the requirements of applicable laws of the Cayman Islands, transfers of uncertificated shares which are registered on the TPEX may be effected by any method of transferring or dealing in securities introduced by the TPEX or operated in accordance with the applicable listing rules, as defined in our Articles, as appropriate.

Our board of directors may decline to register any transfer of shares unless (i) the instrument of transfer is lodged with us, accompanied by the certificate (if any) for the ordinary shares to which it relates and such other evidence as our board of directors may reasonably require to show the right of the transferor to make the transfer; (ii) the instrument of transfer is in respect of only one class of shares; (iii) the instrument of transfer is duly and properly stamped (if required); or (iv) in the case of a transfer to joint holders, the number of joint holders to whom the share is to be transferred does not exceed four.

The registration of transfers of shares may be suspended when our register of members is closed in accordance with our Articles for the purpose of determining those shareholders that are entitled to receive notice of, attend or vote at any meeting of shareholders or any adjournment thereof, or those shareholders that are entitled to receive payment of any dividend, or in order to make a determination as to who is a shareholder for any other purpose.

Variation of Rights of Shares

Whenever our share capital is divided into different classes the rights attached to any class of our shares may (unless otherwise provided by the terms of issue of the shares of that class) only be materially adversely varied or abrogated with the approval by special resolution passed at a separate meeting of the holders of the shares of that class, but not otherwise. The necessary quorum shall be one or more persons at least holding or representing by proxy one-half in nominal or par value amount of the issued shares of the relevant class.

Inspection of Books and Records

Holders of our ordinary shares will have no general right under Cayman Islands law to inspect or obtain copies of our list of shareholders or our corporate records. Our board of directors is required to keep at the office of our service agent in Taiwan copies of our Articles, the minutes of every meeting of the shareholders and the financial statements, the register of members and the counterfoil of corporate bonds issued by us. Any shareholder may request, by submitting evidentiary documents to show his or her interests involved and indicating the scope of interested matters, access to inspect and to make copies of our Articles and accounting books and records.

Without prejudice to the rights of shareholders set out in our Articles, no shareholder is entitled to require discovery of any information in respect of any detail of our trading or any information which is or may be in the nature of a trade secret or secret process which may relate to the conduct of our business and which in the opinion of our board of directors would not be in the interests of the shareholders to communicate to the public.

Borrowing Power

Subject to our Articles and the ROC Regulations Governing Loaning of Funds and Making Endorsement/Guarantee by Public Companies, our board of directors may exercise its power to borrow money and to mortgage or charge our undertaking and property, to issue debentures, debenture stock and other securities whenever money is borrowed or as security for any debt, liability or obligation of us or of any third party.

We, however, cannot borrow money or loan funds to any person except in accordance with the requirements stipulated in our internal policies and the ROC Regulations Governing Loaning of Funds and Making Endorsement/Guarantee by Public Companies.

Listing Rules

As a listed company on the TPEX, we are required to comply with the relevant ROC laws, regulations, rules and code as amended, from time to time, applicable as a result of the original and continued trading or listing of any shares on any Taiwan stock exchange or securities market, including, without limitation the relevant provisions of the Taiwan Securities and Exchange Act, the Acts Governing Relations Between Peoples of the Taiwan Area and the Mainland Area, or any similar statute and the rules and regulations of the Taiwan authorities thereunder, and the rules and regulations promulgated by the ROC FSC, the TPEX or the TWSE. This body of rules is referred to in our Articles as “Applicable Listing Rules” and a number of the provisions of our Articles are subject to the Applicable Listing Rules. In particular, provisions relating to the issue of shares generally by us, the issue of shares to employees, the recording of shareholdings and the issue of share certificates, the issue of fractional shares, the transfer of shares, carrying out mergers and spin-offs, independent directors, board powers and procedure, quorum requirements for shareholder meetings and general meeting procedure, the redemption and purchase of our shares, dealing with treasury shares, borrowing powers, the payment of dividends and other distributions, the preparation of reports and financial statements and the winding up of the company are all matters expressed to be subject to, and should be read in conjunction with, the Applicable Listing Rules. In addition to the Applicable Listing Rules, our Articles are required to be in compliance with the Shareholders’ Rights Protection Checklist, or the Checklist promulgated by the TPEX or TWSE from time to time. On March 22, 2019, our board of directors approved the Seventh Amended and Restated Memorandum and Articles of Association, which incorporated the requirements provided in the checklist promulgated by TPEX in December 2018, or the Checklist. The Seventh Amended and Restated Memorandum and Articles of Association will be submitted to our annual general meeting to be held on June 21, 2019 for approval by special resolution. We are required to incorporate such changes to our Articles in accordance with the Checklist by the deadline requested by TPEX, so we expect that those shareholders’ rights will take effect by the end of June 2019. Except for the requirement that non-resident or foreign investors are obligated to open certain accounts and appoint a tax guarantor in Taiwan and the restrictions described herein, there are no other restrictions on holding or exercising voting rights on our ordinary shares.

Currently, a party who is a PRC person may not hold our ordinary shares unless it is a qualified domestic institutional investor, or QDII, in PRC. In addition, we have committed to the TPEX that at no time will 30% or more of our shares be held by PRC persons. Therefore, at any time when 30% of our shares are held by PRC persons, you will not be entitled to withdraw and hold the underlying ordinary shares, even if you are a QDII in PRC. Under current ROC law, a PRC person means an individual having residence in PRC (but not including a special administrative region of China such as Hong Kong or Macau, if so excluded by applicable laws of the ROC), any legal person, group, or other institutions of China and any corporation and other entity organized in countries outside of the ROC or PRC, but is directly or indirectly controlled by or directly or indirectly has more than 30% of its capital beneficially owned by any PRC person described above.

We cannot exercise any voting rights attached to the treasury shares held by us.

No vote may be exercised with respect to any of the following shares and such shares shall not be counted in determining the number of issued shares: (i) the shares held by any of our subsidiaries, where the total voting shares held by us in such a subsidiary represents more than one half of the total number of voting shares of the total share equity of such a subsidiary; or (ii) the shares held by another company, where the total number of the shares or total shares equity of that company held by us and our subsidiaries directly or indirectly represents more than one half of the total number of voting shares or the total share equity of such a company. If a director gives security over more than 50% of the number of shares the director held at the time such director was elected as a director of us, no vote may be exercised with respect to the shares representing the difference between the pledged shares and 50% of the initial shares, and such shares representing the difference between the pledged shares and 50% of the initial shares shall not be counted in the number of the votes cast by the shareholders present at the general meeting.

In the case of joint holders, the joint holders shall select among them a representative for the exercise of their shareholder's rights and the vote of their representative who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders.

A shareholder of unsound mind, or in respect of whom an order has been made by any court having jurisdiction in mental illness, may vote by his committee, or other person in the nature of a committee appointed by that court, and any such committee or other person, may vote by proxy.

A shareholder cannot exercise his or her own vote or by vote by proxy on behalf of another shareholder in respect of any contract or proposed contract or arrangement if he may be interested therein. Such shares shall not be counted in determining the number of votes of the shareholders present at the meeting with regard to such resolution, but such shares may be counted in determining the number of shares represented at the meeting for the purposes of determining the quorum.

If an ADS holder will receive more than 10% of the issued shares of the company after withdrawal of their deposited securities, then such holder will be required to (i) make a filing with the ROC FSC of the required reporting in accordance with Article 43-1 of the Taiwan Act upon the acquisition of more than 10% of shares of the company, (ii) make a filing with the ROC FSC in accordance with Article 25 of the Taiwan Act of notification of any changes of the shareholding of a director, supervisor, manager or shareholder (together with his or her spouse, minor children and nominee) holding more than 10% of the shares of the company, and (iii) apply for the prior approval of the Investment Commission, Ministry of Economic Affairs, Executive Yuan of the ROC for acquiring 10% or more of shares of the company.

Preference Shares

Pursuant to our Articles, we may issue shares with rights which are preferential to those of ordinary shares issued by us with the approval of a majority of our board of directors present at a meeting attended by two-thirds or more of the total number of directors and with the approval of a special resolution. Our Articles must be amended by special resolution to provide for such preference shares.

Material Differences in Corporate Law

The Companies Law is modeled after the corporate legislation of the United Kingdom but does not follow recent United Kingdom statutory enactments, and differs from laws applicable to United States corporations and their shareholders. Set forth below is a summary of the significant differences between the provisions of the Companies Law applicable to us and the laws applicable to companies incorporated in Delaware and their shareholders. In addition, because our Articles require us to comply with the Checklist, the below comparison also includes a brief summary of the requirements we must follow to maintain such compliance with the TPEX or the TWSE.

	Delaware	Cayman Islands
<i>Title of Organizational Documents</i>	Certificate of Incorporation Bylaws	Memorandum of Association Articles of Association

Duties of Directors

Under Delaware law, the business and affairs of a corporation are managed by or under the direction of its board of directors. In exercising their powers, directors are charged with a fiduciary duty of care to protect the interests of the corporation and a fiduciary duty of loyalty to act in the best interests of its shareholders. The duty of care requires that directors act in an informed and deliberative manner and inform themselves, prior to making a business decision, of all material information reasonably available to them. The duty of care also requires that directors exercise care in overseeing and investigating the conduct of the corporation's employees. The duty of loyalty may be summarized as the duty to act in good faith, not out of self-interest, and in a manner which the director reasonably believes to be in the best interests of the shareholders.

As a matter of Cayman Islands law, directors of Cayman Islands companies owe fiduciary duties to their respective companies to, amongst other things, act in good faith in their dealings with or on behalf of the company and exercise their powers and fulfill the duties of their office honestly. Five core duties are:

- a duty to act in good faith in what the directors bona fide consider to be the best interests of the company (and in this regard, it should be noted that the duty is owed to the company and not to associate companies, subsidiaries or holding companies);
- a duty not to personally profit from opportunities that arise from the office of director;
- a duty of trusteeship of the company's assets;
- a duty to avoid conflicts of interest; and
- a duty to exercise powers for the purpose for which such powers were conferred.

A director of a Cayman Islands company also owes the company a duty to act with skill, care and diligence. A director need not exhibit in the performance of his or her duties a greater degree of skill than may reasonably be expected from a person of his or her knowledge and experience.

The Companies Law has no equivalent provision to Delaware law regarding the limitation of director's liability. However, as a matter of public policy, Cayman Islands law will not allow the limitation of a director's liability to the extent that the liability is a consequence of the director committing a crime or of the director's own fraud, dishonesty or willful default.

Limitations on Personal Liability of Directors

Subject to the limitations described below, a certificate of incorporation may provide for the elimination or limitation of the personal liability of a director to the corporation or its shareholders for monetary damages for a breach of fiduciary duty as a director.

Such provision cannot limit liability for breach of loyalty, bad faith, intentional misconduct, unlawful payment of dividends or unlawful share purchase or redemption. In addition, the certificate of incorporation cannot limit liability for any act or omission occurring prior to the date when such provision becomes effective.

Indemnification of Directors, Officers, Agents, and Others

A corporation has the power to indemnify any director, officer, employee, or agent of the corporation who was, is, or is threatened to be made a party who acted in good faith and in a manner he believed to be in the best interests of the corporation, and if with respect to a criminal proceeding, had no reasonable cause to believe his conduct would be unlawful, against amounts actually and reasonably incurred.

Cayman Islands law does not limit the extent to which a company's articles of association may provide for indemnification of directors and officers, except to the extent any such provision may be held by the Cayman Islands courts to be contrary to public policy, such as to provide indemnification against the consequences of committing a crime, or against the indemnified person's own fraud or dishonesty.

Interested Directors

Under Delaware law, a transaction in which a director who has an interest is not void or voidable solely because such interested director is present at or participates in the meeting that authorizes the transaction if: (i) the material facts as to such interested director's relationship or interests are disclosed or are known to the board of directors and the board in good faith authorizes the transaction by the affirmative vote of a majority of the disinterested directors, even though the disinterested directors are less than a quorum, (ii) such material facts are disclosed or are known to the shareholders entitled to vote on such transaction and the transaction is specifically approved in good faith by

vote of the shareholders, or (iii) the transaction is fair as to the corporation as of the time it is authorized, approved or ratified. Under Delaware law, a director could be held liable for any transaction in which such director derived an improper personal benefit.

Voting Requirements

The certificate of incorporation may include a provision requiring supermajority approval by the directors or shareholders for any corporate action.

In addition, under Delaware law, certain business combinations involving interested shareholders require approval by a supermajority of the non-interested shareholders.

Our Articles contain a provision that prohibits a director from voting (or voting on behalf of another director) in respect of any transaction in which he or she is interested.

Our proposed Seventh Amended and Restated Memorandum and Articles of Association if adopted at the annual general meeting to be held on June 21, 2019 would provide that, where the spouse of a director, a person with a kinship to a director within the second degree, or a company controlled by or controlling a director has a direct or indirect interest in any matter, such director will be deemed to have an interest in such matter.

For the protection of shareholders, certain matters must be approved by special resolution of the shareholders as a matter of Cayman Islands law, including alteration of the memorandum or articles of association, appointment of inspectors to examine company affairs, reduction of share capital (subject, in relevant circumstances, to court approval), change of name, authorization of a plan of merger or transfer by way of continuation to another jurisdiction or consolidation or voluntary winding up of the company.

The Companies Law requires that a special resolution be passed by a super majority of at least two-thirds or such higher percentage as set forth in the articles of association, of shareholders being entitled to vote and do vote in person or by proxy at a general meeting, or by unanimous written consent of shareholders entitled to vote at a general meeting. However, our Articles do not permit resolutions of shareholders to be passed in writing in lieu of a general meeting.

Voting for Directors

Under Delaware law, unless otherwise specified in the certificate of incorporation or bylaws of the corporation, directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors.

The Companies Law defines “special resolutions” only. A company’s articles of association can therefore tailor the definition of “ordinary resolutions” as a whole, or with respect to specific provisions. Our Articles provide that the election of directors shall be subject to applicable listing rules. At a general meeting of election of directors, the number of votes exercisable in respect of one share shall be the same as the number of directors to be elected, and the total number of votes per share may be consolidated for election of one candidate or may be split for election of two or more candidates. A candidate to whom the ballots cast represent a prevailing number of votes shall be deemed a director so elected.

Cumulative Voting

No cumulative voting for the election of directors unless so provided in the certificate of incorporation.

No cumulative voting for the election of directors unless so provided in the articles of association. Our Articles expressly provide for cumulative voting on the election of directors as described above.

Directors’ Powers Regarding Bylaws

The certificate of incorporation may grant the directors the power to adopt, amend or repeal bylaws.

The memorandum and articles of association may only be amended by a special resolution of the shareholders.

Nomination and Removal of Directors and Filling Vacancies on Board

Shareholders may generally nominate directors if they comply with advance notice provisions and other procedural requirements in company bylaws. Holders of a majority of the shares may remove a director with or without cause, except in certain cases involving a classified board or if the company uses cumulative voting. Unless otherwise provided for in the certificate of incorporation, directorship vacancies are filled by a majority of the directors elected or then in office.

Nomination and removal of directors and filling of board vacancies are governed by the terms of the articles of association. Our Articles provide that only shareholders may elect directors by cumulative voting and may remove directors by Supermajority Resolution.

Mergers and Similar Arrangements

Under Delaware law, with certain exceptions, a merger, consolidation, exchange or sale of all or substantially all the assets of a corporation must be approved by the board of directors and a majority of the outstanding shares entitled to vote thereon. Under Delaware **law**, a shareholder of a corporation participating in certain major corporate transactions may, under certain circumstances, be entitled to appraisal rights pursuant to which such shareholder may receive cash in the amount of the fair value of the shares held by such shareholder (as determined by a court) in lieu of the consideration such shareholder would otherwise receive in the transaction. Delaware law also provides that a parent corporation, by resolution of its board of directors, may merge with any subsidiary, of which it owns at least

The Companies Law provides for the merger or consolidation of two or more companies into a single entity. The legislation makes a distinction between a “consolidation” and a “merger.” In a consolidation, a new entity is formed from the combination of each participating company, and the separate consolidating parties, as a consequence, cease to exist and are each stricken by the Registrar of Companies. In a merger, one company remains as the surviving entity, having in effect absorbed the other merging party that then ceases to exist

Two or more Cayman Islands companies may merge or consolidate. Cayman Islands companies may also merge or consolidate with foreign companies provided that the laws of the foreign jurisdiction permit such merger or consolidation.

90% of each class of capital stock without a vote by shareholders of such subsidiary. Upon any such merger, dissenting shareholders of the subsidiary would have appraisal rights.

Under the Companies Law, a plan of merger or consolidation shall be authorized by each constituent company by way of (i) a special resolution of the members of each such constituent company; and (ii) such other authorization, if any, as may be specified in such constituent company's articles of association.

Shareholder approval is not required where a parent company registered in the Cayman Islands seeks to merge with one or more of its subsidiaries registered in the Cayman Islands and a copy of the plan of merger is given to every member of each subsidiary company to be merged unless that member agrees otherwise.

Secured creditors must consent to the merger although application can be made to the Grand Court of the Cayman Islands for such requirement to be waived if such secured creditor does not grant its consent to the merger. Where a foreign company wishes to merge with a Cayman company, consent or approval to the transfer of any security interest granted by the foreign company to the resulting Cayman entity in the transaction is required, unless otherwise released or waived by the secured party. If the merger plan is approved, it is then filed with the Cayman Islands Registrar of Companies along with a declaration by a director of each company. The Registrar of Companies will then issue a certificate of merger which shall be prima facie evidence of compliance with all requirements of the Companies Law in respect of the merger or consolidation.

The surviving or consolidated entity remains or becomes active while the other company or companies are automatically dissolved. Unless the shares of such shareholder are publicly listed or quoted, dissenting

shareholders in a merger or consolidation of this type are entitled to payment of the fair value of their shares if such shareholder provides a written objection before the vote on such merger or consolidation. With respect to shares that are listed or quoted, a shareholder shall have similar rights only if it is required by the terms of the merger or consolidation to accept for such shares property other than (i) shares (or depositary receipts in respect thereof) in the surviving or consolidated company; (ii) listed or quoted shares (or depositary receipts in respect thereof) of another company; (iii) cash in lieu of any fractions of shares or depositary receipts described at (i) and (ii); or (iv) any combination of shares, depositary receipts or cash described in (i) — (iii).

Cayman companies may also be restructured or amalgamated under supervision of the Grand Court of the Cayman Islands by way of a court-sanctioned “scheme of arrangement.” A scheme of arrangement is one of several transactional mechanisms available in the Cayman Islands for achieving a restructuring. Others include share capital exchange, merger (as described above), asset acquisition or control, through contractual arrangements, of an operating business. A scheme of arrangement must not be beyond the powers of the company, as stated in the constitutional documents of the company and also requires the approval of a majority, in number, of each class of shareholders and creditors with whom the arrangement is to be made and who must in addition represent three-fourths in value of each such class of shareholders or creditors, as the case may be, that are present and voting either in person or by proxy at the meeting summoned for that purpose.

The convening of the meetings and subsequently the terms of the arrangement must be sanctioned by the Grand Court of the Cayman Islands. While a dissenting shareholder would have the right to express to the Court its view that the transaction ought not be approved, the Court can be expected to approve the scheme of arrangement if it is satisfied that:

- the classes which are required to approve the scheme of arrangement have been properly constituted, so that the members of such classes are properly represented;
- the meetings held by the company in relation to the approval of the scheme of arrangement by such classes have been convened and held in accordance with any directions given by the Court;
- the scheme of arrangement has been properly explained to the shareholders or creditors so that they have been able to exercise an informed vote in respect of the scheme; the scheme of arrangement is one which an intelligent and honest man, who is a member of the relevant class and properly acting might approve.

When a takeover offer is made and accepted by holders of 90% of the shares within four months, the offeror may, within a two-month period, require the holders of the remaining shares to transfer such shares on the terms of the offer. An objection may be made to the Grand Court of the Cayman Islands but is unlikely to succeed unless there is evidence of fraud, bad faith or collusion. If the arrangement and reconstruction are thus approved, any dissenting shareholders would have no rights comparable to appraisal rights, which would otherwise ordinarily be available to dissenting shareholders of

United States corporations, providing rights to receive payment in cash for the judicially determined value of the shares.

Our Articles provide that in the event the resolutions with respect to a merger are approved in accordance with the laws of the Cayman Islands, any shareholder who has notified us in writing of his objection to such proposal prior to such meeting and subsequently raised his objection at the meeting may request us to purchase all of his shares at the then prevailing fair price. In the event any part of the company's business is spun off or involved in any merger, the shareholder, who has forfeited his right to vote on such matter and expressed his dissent therefor, in writing or verbally (with a record) before or during the general meeting, may request us to buy back all of his shares at the then prevailing fair price. In the event that we fail to reach such agreement with the shareholder within 60 days after the resolution date, the shareholder may, within 30 days after such 60-day period, file a petition to any competent court of ROC for a ruling on the appraisal price, and to the extent that the ruling is capable of enforcement and recognition in the relevant jurisdiction, such ruling by such ROC court shall be binding and conclusive as between us and requested shareholder solely with respect to the appraisal price.

Shareholder Suits

Class actions and derivative actions generally are available to shareholders under Delaware law for, among other things, breach of fiduciary duty, corporate waste and actions not taken in accordance with applicable law. In such actions, the court generally has discretion to permit the winning party to recover attorneys' fees incurred in connection with such action.

Our Articles provide that, if we propose to effect any merger, transfer and assumption of our business or assets, share swap or spin-off, as a result of which we would cease to be a TPEX-listed company and the surviving company, transferee company, existing company or newly set-up company (depending on the circumstances) is not a company listed on TWSE or TPEX, such transaction must be approved by the shareholders

representing two thirds of the issued and outstanding shares of us.

The mergers and acquisitions of the Company shall also be subject to the procedural requirements under the Applicable Listing Rules.

The rights of shareholders under Cayman Islands law are not as extensive as those under Delaware law. Class actions are generally not available to shareholders under Cayman Islands laws; historically, there have not been any reported instances of such class actions having been successfully brought before the Cayman Islands courts. In principle, we will normally be the proper plaintiff and a derivative action may be brought by a minority shareholder in only limited circumstances. In this regard, the Cayman Islands courts would ordinarily be expected to follow English case law precedent, which would permit a shareholder to commence an action in the company's name to remedy a wrong done to the company where the act complained of cannot be ratified by the shareholders and where control of the company by the wrongdoer results in the company not pursuing a remedy itself. The case law shows that derivative actions have been permitted in respect of acts that are beyond the company's corporate power, illegal, where the individual rights of the plaintiff shareholder have been infringed or are about to be infringed and acts that are alleged to constitute a "fraud on the minority." The winning party in such an action generally would be able to recover a portion of attorney's fees incurred in connection with such action.

Our Articles provide that, subject to the laws of the Cayman Islands, any shareholder(s) holding three percent or more of the total number of our issued shares for a period of one year or a longer time shall have the right to submit a petition for and on behalf of

us against our director(s), and the Taipei District Court, ROC, may be court of the first instance for this matter.

Our proposed Seventh Amended and Restated Memorandum and Articles of Association if adopted at the annual general meeting to be held on June 21, 2019 would provide that, subject to the laws of the Cayman Islands, any shareholder(s) holding one percent or more of the total number of our issued shares for a period of six months or a longer time shall have the right to submit a petition for and on behalf of us against our director(s), and Taipei District Court, ROC, may have jurisdiction over such petition.

Shareholders of a Cayman Islands exempted company have no general right under Cayman Islands law to inspect or obtain copies of a list of shareholders or other corporate records (other than the register of mortgages or charges) of the company. However, these rights may be provided in the company's articles of association.

Our proposed Seventh Amended and Restated Memorandum and Articles of Association if adopted at the annual general meeting to be held on June 21, 2019 would provide that, in the event that a general meeting is convened by the board of directors or any other person having a right to convene the general meeting, such convener(s) may request us or our shareholders' service agent provide the register of members.

The Companies Law does not provide shareholders any right to bring business before a meeting or requisition a general meeting. However, these rights may be provided in the company's articles of association. Our Articles do provide for these rights.

Inspection of Corporate Records

Under Delaware law, shareholders of a Delaware corporation have the right during normal business hours to inspect for any proper purpose, and to obtain copies of list(s) of shareholders and other books and records of the corporation and its subsidiaries, if any, to the extent the books and records of such subsidiaries are available to the corporation.

Shareholder Proposals

Unless provided in the corporation's certificate of incorporation or bylaws, Delaware law does not include a provision restricting the manner in which shareholders may bring business before a meeting.

Approval of

***Corporate Matters by
Written Consent***

Delaware law permits shareholders to take action by written consent signed by the holders of outstanding shares having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting of shareholders.

The Companies Law allows a special resolution to be passed in writing if signed by all the voting shareholders (if authorized by the articles of association).

Our Articles do not authorize such written consents.

***Calling of Special
Shareholders Meetings***

Delaware law permits the board of directors or any person who is authorized under a corporation's certificate of incorporation or bylaws to call a special meeting of shareholders.

The Companies Law does not have provisions governing the proceedings of shareholders meetings which are usually provided in the articles of association.

Our Articles allow for shareholders' meetings to be convened on the requisition in writing of any shareholder or shareholders holding at least three percent of the issued voting share capital for one year or longer, subject to certain procedural requirements.

Our proposed Seventh Amended and Restated Memorandum and Articles of Association if adopted at the annual general meeting to be held on June 21, 2019 would provide that, an extraordinary general meeting may be convened on the requisition of one or more shareholders(s) holding more than half of the paid up capital of us having the right of voting at a general meeting for a period of at least three consecutive months at the date the book closure period commences.

Our proposed Seventh Amended and Restated Memorandum and Articles of Association if adopted at the annual general meeting to be held on June 21, 2019 would provide that, in the event that our board of directors does not or cannot convene a general meeting, or an independent director member of audit committee otherwise finds it necessary for the interests of shareholders, the independent director may convene a general meeting.

C. Material contracts.

Except as otherwise disclosed in this Annual Report (including the exhibits thereto), we are not currently, and have not been in the last two years, party to any material contract, other than contracts entered into in the ordinary course of our business.

Underwriting Agreement

We entered into an underwriting agreement among Leerink Partners LLC and Piper Jaffray & Co. as representatives of the underwriters, on May 4, 2018, with respect to the ADSs sold in our IPO. We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the U.S. Securities Act of 1933, as amended, and to contribute to payments the underwriters may be required to make in respect of such liabilities.

D. Exchange controls.

There are no governmental laws, decrees, regulations or other legislation in the Cayman Islands that may affect the import or export of capital, including the availability of cash and cash equivalents for use by us, or that may affect the remittance of dividends, interest, or other payments by us to non-resident holders of our ordinary shares or ADSs.

Approval by the Investment Commission, the Ministry of Economic Affairs, is required for all foreign investments into Taiwanese entities regardless of the remittance amount, which does not relate to foreign exchange control but may be relevant to the import of capital. The Republic of China, or the ROC, has foreign exchange controls over the import and export of capital relating to ASLAN Pharmaceuticals Taiwan Limited, or ASLAN Taiwan. As long as ASLAN Taiwan receives the relevant governmental approval for the inward and outward remittances, or the accumulated remittances in a year do not exceed the annual quota (which is currently \$50 million for inward remittances and \$50 million for outward remittances), ASLAN Taiwan may import (subject to the foreign investment approval from the Investment Commission) or export capital without foreign exchange controls, provided that it has submitted a foreign exchange report form, and in the case of a remittance in excess of \$1 million, has provided for review the necessary documents to prove the purpose of the remittances.

There are no governmental laws, decrees, regulations or other legislation in the ROC that may affect the remittance of dividends, interest, or other payments by us to non-resident holders of our ordinary shares or ADSs.

E. Taxation.

The following is a discussion of the material Cayman Islands, ROC and U.S. federal income tax considerations that may be relevant to an investment decision by a potential investor with respect to our ADSs. This summary should not be considered a comprehensive description of all the tax considerations that may be relevant to the decisions to acquire ADSs.

Material U.S. Federal Income Tax Considerations for U.S. Holders

The following discussion describes the material U.S. federal income tax consequences relating to the ownership and disposition of our ordinary shares or ADSs by U.S. Holders (as defined below). This discussion applies to U.S. Holders that purchase our ADSs pursuant to our public offering and hold such ADSs as capital assets. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended, or the Code, U.S. Treasury regulations promulgated thereunder and administrative and judicial interpretations thereof, all as in effect on the date hereof and all of which are subject to change, possibly with retroactive effect. This discussion does not address all of the U.S. federal income tax consequences that may be relevant to specific U.S. Holders in light of their particular circumstances or to U.S. Holders subject to special treatment under U.S. federal income tax law (such as certain financial institutions, insurance companies, dealers or traders in securities or other persons that generally mark their securities to market for U.S. federal income tax purposes, tax-exempt entities or governmental organizations, retirement plans, regulated investment companies, real estate investment trusts, grantor trusts, brokers, dealers or traders in securities, commodities, currencies or notional principal contracts, certain former citizens or long-term residents of the United States, persons who hold our ordinary shares or ADSs as part of a “straddle,” “hedge,” “conversion transaction,” “synthetic security” or integrated investment, persons that have a “functional currency” other than the U.S. dollar, persons that own directly, indirectly or through attribution 10% or more of the voting power or value of our ordinary shares, corporations that accumulate earnings to avoid U.S. federal income tax, partnerships and other pass-through entities, and investors in such pass-through entities). This discussion does not address any U.S. state or local or non-U.S. tax consequences or any U.S. federal estate, gift or alternative minimum tax consequences.

As used in this discussion, the term “U.S. Holder” means a beneficial owner of our ordinary shares or ADSs who is, for U.S. federal income tax purposes, (1) an individual who is a citizen or resident of the United States, (2) a corporation (or entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia, (3) an estate the income of which is subject to U.S. federal income tax regardless of its source or (4) a trust (x) with respect to which a court within the United States is able to exercise primary supervision over its administration and one or more United States persons have the authority to control all of its substantial decisions or (y) that has elected under applicable U.S. Treasury regulations to be treated as a domestic trust for U.S. federal income tax purposes.

If an entity treated as a partnership for U.S. federal income tax purposes holds our ordinary shares or ADSs, the U.S. federal income tax consequences relating to an investment in such ordinary shares or ADSs will depend in part upon the status and activities of such entity and the particular partner. Any such entity should consult its own tax advisor regarding the U.S. federal income tax consequences applicable to it and its partners of the purchase, ownership and disposition of our ordinary shares or ADSs.

Persons considering an investment in our ADSs should consult their own tax advisors as to the particular tax consequences applicable to them relating to the purchase, ownership and disposition of our ADSs, including the applicability of U.S. federal, state and local tax laws and non-U.S. tax laws.

The discussion below assumes that the representations contained in the deposit agreement are true and that the obligations in the deposit agreement and any related agreement will be complied with in accordance with their terms. Generally, a holder of an ADS should be treated for U.S. federal income tax purposes as holding the ordinary shares represented by the ADS. Accordingly, no gain or loss will be recognized upon an exchange of ADSs for the underlying ordinary shares represented by such ADSs. The U.S. Treasury has expressed concerns that intermediaries in the chain of ownership between the holder of an ADS and the issuer of the security underlying the ADS may be taking actions that are inconsistent with the beneficial ownership of the underlying security. Accordingly, the creditability of foreign taxes, if any, as described below, could be affected by actions taken by intermediaries in the chain of ownership between the holders of ADSs and our company if as a result of such actions the holders of ADSs are not properly treated as beneficial owners of the underlying ordinary shares.

Passive Foreign Investment Company Consequences

In general, a corporation organized outside the United States will be treated as a passive foreign investment company, or PFIC, for any taxable year in which either (1) at least 75% of its gross income is “passive income” (the “PFIC income test”), or (2) on average at least 50% of its assets, determined on a quarterly basis, are assets that produce passive income or are held for the production of passive income (the “PFIC asset test”). Passive income for this purpose generally includes, among other things, dividends, interest, royalties, rents, and gains from the sale or exchange of property that gives rise to passive income. Assets that produce or are held for the production of passive income generally include cash, even if held as working capital or raised in a public offering, marketable securities, and other assets that may produce passive income. Generally, in determining whether a non-U.S. corporation is a PFIC, a proportionate share of the income and assets of each corporation in which it owns, directly or indirectly, at least a 25% interest (by value) is taken into account.

Although PFIC status is determined on an annual basis and generally cannot be determined until the end of the taxable year, based on the nature of our current and expected income and the current and expected value and composition of our assets, we expect to be a PFIC for our current taxable year. Because our income for the next several taxable years is expected to consist principally of interest from cash and cash equivalents received from our public offering or prior offerings, we believe that we likely will be a PFIC under the PFIC income test in future taxable years as well. In part, because we may hold a substantial amount of cash and cash equivalents, and because the calculation of the value of our assets may be based in part on the value of our ordinary shares or ADSs, which may fluctuate considerably, we believe we may also be a PFIC in future taxable years under the PFIC asset test. Even if we determine that we are not a PFIC for a taxable year, there can be no assurance that the Internal Revenue Service, or IRS, will agree with our conclusion and that the IRS would not successfully challenge our position.

If we are a PFIC in any taxable year during which a U.S. Holder owns our ordinary shares or ADSs, the U.S. Holder could be liable for additional taxes and interest charges under the “PFIC excess distribution regime” upon (1) a distribution paid during a taxable year that is greater than 125% of the average annual distributions paid in the three preceding taxable years, or, if shorter, the U.S. Holder’s holding period for our ordinary shares or ADSs, and (2) any gain recognized on a sale, exchange or other disposition, including a pledge, of our ordinary shares or ADSs, whether or not we continue to be a PFIC. Under the PFIC excess distribution regime, the tax on such distribution or gain would be determined by allocating the distribution or gain ratably over the U.S. Holder’s holding period for our ordinary shares or ADSs. The amount allocated to the current taxable year (i.e., the year in which the distribution occurs or the gain is recognized) and any year prior to the first taxable year in which we are a PFIC will be taxed as ordinary income earned in the current taxable year. The amount allocated to other taxable years will be taxed at the highest marginal rates in effect for individuals or corporations, as applicable, to ordinary income for each such taxable year, and an interest charge, generally applicable to underpayments of tax, will be added to the tax.

If we are a PFIC for any year during which a U.S. Holder holds our ordinary shares or ADSs, we must generally continue to be treated as a PFIC by that holder for all succeeding years during which the U.S. Holder holds such ordinary shares or ADSs, unless we cease to meet the requirements for PFIC status and the U.S. Holder makes a “deemed sale” election with respect to our ordinary shares or ADSs. If the election is made, the U.S. Holder will be deemed to sell our ordinary shares or ADSs it holds at their fair market value on the last day of the last taxable year in which we qualified as a PFIC, and any gain recognized from such deemed sale would be taxed under the PFIC excess distribution regime, but any loss would not be recognized. After the deemed sale election, the U.S. Holder’s ordinary shares or ADSs would not be treated as shares of a PFIC unless we subsequently become a PFIC.

If we are a PFIC for any taxable year during which a U.S. Holder holds our ordinary shares or ADSs and one of our non-United States subsidiaries is also a PFIC (i.e., a lower-tier PFIC), such U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC and would be taxed under the PFIC excess distribution regime on distributions by the lower-tier PFIC and on gain from the disposition of shares of the lower-tier PFIC even though such U.S. Holder would not receive the proceeds of those distributions or dispositions. Any of our non-United States subsidiaries that have elected to be disregarded as entities separate from us or as partnerships for U.S. federal income tax purposes would not be corporations under U.S. federal income tax law and accordingly, cannot be classified as lower-tier PFICs. However, non-United States subsidiaries that have not made the election may be classified as a lower-tier PFIC if we are a PFIC during your holding period and the subsidiary meets the PFIC income test or PFIC asset test. Each U.S. Holder is advised to consult its tax advisors regarding the application of the PFIC rules to any of our non-United States subsidiaries.

If we are a PFIC, a U.S. Holder will not be subject to tax under the PFIC excess distribution regime on distributions or gain recognized on our ordinary shares or ADSs if a valid “mark-to-market” election is made by the U.S. Holder for our ordinary shares or ADSs. An electing U.S. Holder generally would take into account as ordinary income each year, the excess of the fair market value of our ordinary shares or ADSs held at the end of such taxable year over the adjusted tax basis of such ordinary shares or ADSs. The U.S. Holder would also take into account, as an ordinary loss each year, the excess of the adjusted tax basis of such ordinary shares or ADSs over their fair market value at the end of the taxable year, but only to the extent of the excess of amounts previously included in income over ordinary losses deducted as a result of the mark-to-market election. The U.S. Holder’s tax basis in our ordinary shares or ADSs would be adjusted to reflect any income or loss recognized as a result of the mark-to-market election. Any gain from a sale, exchange or other disposition of our ordinary shares or ADSs in any taxable year in which we are a PFIC would be treated as ordinary income and any loss from such sale, exchange or other disposition would be treated first as ordinary loss (to the extent of any net mark-to-market gains previously included in income) and thereafter as capital loss. If, after having been a PFIC for a taxable year, we cease to be classified as a PFIC because we no longer meet the PFIC income or PFIC asset test, the U.S. Holder would not be required to take into account any latent gain or loss in the manner described above and any gain or loss recognized on the sale or exchange of the ordinary shares or ADSs would be classified as a capital gain or loss.

A mark-to-market election is available to a U.S. Holder only for “marketable stock.” Generally, stock will be considered marketable stock if it is “regularly traded” on a “qualified exchange” within the meaning of applicable U.S. Treasury regulations. A class of stock is regularly traded during any calendar year during which such class of stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter.

Our ADSs will be marketable stock as long as they remain listed on The Nasdaq Global Market and are regularly traded. A mark-to-market election will not apply to the ordinary shares or ADSs for any taxable year during which we are not a PFIC, but will remain in effect with respect to any subsequent taxable year in which we become a PFIC. Such election will not apply to any of our non-U.S. subsidiaries. Accordingly, a U.S. Holder may continue to be subject to tax under the PFIC excess distribution regime with respect to any lower-tier PFICs notwithstanding the U.S. Holder’s mark-to-market election for the ordinary shares or ADSs.

The tax consequences that would apply if we are a PFIC would also be different from those described above if a U.S. Holder were able to make a valid qualified electing fund, or QEF, election. As we do not expect to provide U.S. Holders with the information necessary for a U.S. Holder to make a QEF election, prospective investors should assume that a QEF election will not be available.

The U.S. federal income tax rules relating to PFICs are very complex. Prospective U.S. investors are strongly urged to consult their own tax advisors with respect to the impact of PFIC status on the purchase, ownership and disposition of our ADSs, the consequences to them of an investment in a PFIC, any elections available with respect to the ADSs and the IRS information reporting obligations with respect to the purchase, ownership and disposition of ADSs of a PFIC.

Distributions

Subject to the discussion above under “—Passive Foreign Investment Company Consequences,” a U.S. Holder that receives a distribution with respect to our ordinary shares or ADSs generally will be required to include the gross amount of such distribution in gross income as a dividend when actually or constructively received to the extent of the U.S. Holder’s pro rata share of our current and/or accumulated earnings and profits (as determined under U.S. federal income tax principles). To the extent a distribution received by a U.S. Holder is not a dividend because it exceeds the U.S. Holder’s pro rata share of our current and accumulated earnings and profits, it will be treated first as a tax-free return of capital and reduce (but not below zero) the adjusted tax basis of the U.S. Holder’s ordinary shares or ADSs. To the extent the distribution exceeds the adjusted tax basis of the U.S. Holder’s ordinary shares or ADSs, the remainder will be taxed as capital gain. Because we may not account for our earnings and profits in accordance with U.S. federal income tax principles, U.S. Holders should expect all distributions to be reported to them as dividends.

Distributions on our ordinary shares or ADSs that are treated as dividends generally will constitute income from sources outside the United States for foreign tax credit purposes and generally will constitute passive category income. Such dividends will not be eligible for the “dividends received” deduction generally allowed to corporate shareholders with respect to dividends received from U.S. corporations. Dividends paid by a “qualified foreign corporation” to certain non-corporate U.S. Holders may be eligible for taxation at a reduced capital gains rate rather than the marginal tax rates generally applicable to ordinary income provided that a holding period requirement (more than 60 days of ownership, without protection from the risk of loss, during the 121-day period beginning 60 days before the ex-dividend date) and certain other requirements are met. Each U.S. Holder is advised to consult its tax advisors regarding the availability of the reduced tax rate on dividends to its particular circumstances. However, if we are a PFIC for the taxable year in which the dividend is paid or the preceding taxable year (see discussion above under “—Passive Foreign Investment Company Consequences”), we will not be treated as a qualified foreign corporation, and therefore the reduced capital gains tax rate described above will not apply.

Dividends will be included in a U.S. Holder’s income on the date of the Depository’s receipt of the dividend. The amount of any dividend income paid in NT dollars will be the U.S. dollar amount calculated by reference to the exchange rate in effect on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars. If the dividend is converted into U.S. dollars on the date of receipt, a U.S. Holder should not be required to recognize foreign currency gain or loss in respect to the dividend income. A U.S. Holder may have foreign currency gain or loss if the dividend is converted into U.S. dollars after the date of receipt.

A non-U.S. corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) generally will be considered to be a qualified foreign corporation with respect to any dividend it pays on ordinary shares or ADSs that are readily tradable on an established securities market in the United States.

Sale, Exchange or Other Disposition of Our Ordinary Shares or ADSs

Subject to the discussion above under “—Passive Foreign Investment Company Consequences,” a U.S. Holder generally will recognize capital gain or loss for U.S. federal income tax purposes upon the sale, exchange or other disposition of our ordinary shares or ADSs in an amount equal to the difference, if any, between the amount realized (i.e., the amount of cash plus the fair market value of any property received) on the sale, exchange or other disposition and such U.S. Holder’s adjusted tax basis in the ordinary shares or ADSs. Such capital gain or loss generally will be long-term capital gain taxable at a reduced rate for non-corporate U.S. Holders or long-term capital loss if, on the date of sale, exchange or other disposition, the ordinary shares or ADSs were held by the U.S. Holder for more than one year. Any capital gain of a non-corporate U.S. Holder that is not long-term capital gain is taxed at ordinary income rates. The deductibility of capital losses is subject to limitations. Any gain or loss recognized from the sale or other disposition of our ordinary shares or ADSs will generally be gain or loss from sources within the United States for U.S. foreign tax credit purposes.

Medicare Tax

Certain U.S. Holders that are individuals, estates or trusts and whose income exceeds certain thresholds generally are subject to a 3.8% tax on all or a portion of their net investment income, which may include their gross dividend income and net gains from the disposition of our ordinary shares or ADSs. If you are a United States person that is an individual, estate or trust, you are encouraged to consult your tax advisors regarding the applicability of this Medicare tax to your income and gains in respect of your investment in our ordinary shares or ADSs.

Information Reporting and Backup Withholding

U.S. Holders may be required to file certain U.S. information reporting returns with the IRS with respect to an investment in our ordinary shares or ADSs, including, among others, IRS Form 8938 (Statement of Specified Foreign Financial Assets). As described above under “Passive Foreign Investment Company Consequences,” each U.S. Holder who is a shareholder of a PFIC must file an annual report containing certain information. U.S. Holders paying more than \$100,000 for our ordinary shares or ADSs may be required to file IRS Form 926 (Return by a U.S. Transferor of Property to a Foreign Corporation) reporting this payment. Substantial penalties may be imposed upon a U.S. Holder that fails to comply with the required information reporting.

Dividends on and proceeds from the sale or other disposition of our ADSs may be reported to the IRS unless the U.S. Holder establishes a basis for exemption. Backup withholding may apply to amounts subject to reporting if the holder (1) fails to provide an accurate U.S. taxpayer identification number or otherwise establish a basis for exemption, or (2) is described in certain other categories of persons. However, U.S. Holders that are corporations generally are excluded from these information reporting and backup withholding tax rules.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules generally will be allowed as a refund or a credit against a U.S. Holder’s U.S. federal income tax liability if the required information is furnished by the U.S. Holder on a timely basis to the IRS.

U.S. Holders should consult their own tax advisors regarding the backup withholding tax and information reporting rules.

EACH PROSPECTIVE INVESTOR IS URGED TO CONSULT ITS OWN TAX ADVISOR ABOUT THE TAX CONSEQUENCES TO IT OF AN INVESTMENT IN OUR ADSs IN LIGHT OF THE INVESTOR'S OWN CIRCUMSTANCES.

Cayman Taxation

Prospective investors should consult their professional advisers on the possible tax consequences of buying, holding or selling any ADSs or ordinary shares under the laws of their country of citizenship, residence or domicile.

The following is a discussion on certain Cayman Islands income tax consequences of an investment in the ADSs or ordinary shares. The discussion is a general summary of present law, which is subject to prospective and retroactive change. It is not intended as tax advice, does not consider any investor's particular circumstances, and does not consider tax consequences other than those arising under Cayman Islands law.

No stamp duty, capital duty, registration or other issue or documentary taxes are payable in the Cayman Islands on the creation, issuance or delivery of the ADSs or ordinary shares. The Cayman Islands currently have no form of income, corporate or capital gains tax and no estate duty, inheritance tax or gift tax. There are currently no Cayman Islands' taxes or duties of any nature on gains realized on a sale, exchange, conversion, transfer or redemption of the ADSs or ordinary shares. Payments of dividends and capital in respect of the ADSs or ordinary shares will not be subject to taxation in the Cayman Islands and no withholding will be required on the payment of interest and principal or a dividend or capital to any holder of the ADSs or ordinary shares, nor will gains derived from the disposal of the ADSs or ordinary shares be subject to Cayman Islands income or corporation tax as the Cayman Islands currently have no form of income or corporation taxes.

We are incorporated under the laws of the Cayman Islands as an exempted company with limited liability and, as such, have applied for and expect to receive an undertaking from the Governor of the Cayman Islands that no law enacted in the Cayman Islands during the period of 20 years from the date of the undertaking imposing any tax to be levied on profits, income, gains or appreciation shall apply to us or our operations and no such tax or any tax in the nature of estate duty or inheritance tax shall be payable (directly or by way of withholding) on the ADSs or ordinary shares, debentures or other obligations of ours.

ROC Taxation

The following is a summary under present law of the principal ROC tax consequences of the ownership and disposition of ADSs and shares to a Non-Resident Individual or a Non-Resident Entity that owns ADS or shares (each a Non-ROC Holder). As used in this section, a "Non-Resident individual" is a foreign national individual who is not physically present in the ROC for 183 days or more during any calendar year; and a "Non-Resident Entity" is a corporation or a non-corporate body that is organized under the laws of a jurisdiction other than the ROC and has no fixed place of business or other permanent establishment or business agent in the ROC. Prospective purchasers of the ADSs should consult their tax advisors concerning the ROC tax consequences of owning the ADSs or shares and the laws of any other relevant taxing jurisdiction to which they are subject.

Sale

There is no ROC tax on (i) the purchase of the ADSs, (ii) the sale of the ADSs or (iii) conversion of the ADSs into their underlying shares. However, securities transaction tax will be withheld at the rate of 0.3% of the transaction price upon a sale of the underlying shares in the ROC.

Under current ROC law, capital gains on transactions in securities issued by Cayman Islands companies and held by a Non-ROC Holder are exempt from income tax. This exemption applies to capital gains derived from the sale of the said shares.

Tax Guarantor

If a holder of non-ROC nationality converts the ADSs held by the holder into the underlying shares, such holder is required under current ROC law and regulations to appoint a tax agent in the ROC. Such agent must meet certain qualifications set by the Ministry of Finance of the ROC and, upon appointment, become a guarantor of such holder's ROC tax obligations. Evidence of the appointment of such agent and the approval for such appointment by the ROC tax authorities would be required as conditions to such holder's repatriation of the profit derived from the sale of shares. There can be no assurance that a foreign holder will be able to appoint and obtain approval for the required agent in a timely manner.

Subject to certain exceptions, under current ROC law, upon the repatriation of profits of shares sold within the ROC, the tax agent so appointed is required to submit evidence of the appointment of the tax agent to, and approval thereof by, the tax authority, or to submit tax clearance certificates issued by the tax authority. Notwithstanding the above requirements for the appointment of a tax agent or submission of tax clearance certificates as provided in the ROC regulations, the Central Bank of the ROC has not required submission of such evidence or tax clearance certificates as condition to repatriation of sale proceeds of shares from sales that take place within the ROC. However, there can be no assurance that the Central Bank of the ROC will not require submission of such evidence or tax clearance certificates in the future.

F. Dividends and paying agents.

Not applicable.

G. Statement by experts.

Not applicable.

H. Documents on display.

We are subject to the informational requirements of the Exchange Act and are required to file reports and other information with the SEC. The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with SEC using its EDGAR system.

We are a “foreign private issuer” as such term is defined in Rule 405 under the Securities Act, and are not subject to the same requirements that are imposed upon U.S. domestic issuers by the SEC. Under the Exchange Act, we are subject to reporting obligations that, in certain respects, are less detailed and less frequent than those of U.S. domestic reporting companies. As a result, we do not file the same reports that a U.S. domestic issuer would file with the SEC. We also make available on our website’s investor relations page, free of charge, our annual report and the text of our reports on Form 6-K, including any amendments to these reports, as well as certain other SEC filings, as soon as reasonably practicable after they are electronically filed with or furnished to the SEC. The address for our investor relations page is www.aslanpharma.com. The information contained on our website is not incorporated by reference in this annual report.

I. Subsidiary Information.

Not applicable.

Item 11. Quantitative and Qualitative Disclosures About Market Risk.

Our financial risk management objective is to monitor and manage the financial risks relating to our operations. These risks include risks in financial markets (including currency risk, interest rate risk and other price risk), credit risk and liquidity risk. In order to minimize the effect of financial risks, we devote time and resources to identifying and evaluating the uncertainty of the financial market to mitigate risk exposures.

Our activities expose us primarily to risks of changes in foreign currency exchange rates, interest rates and other price risks.

A. Foreign Exchange Risk

We have foreign currency transactions, which expose us to foreign currency risks. The significant financial assets and liabilities denominated in foreign currencies as of December 31, 2017 were as follows:

	December 31, 2017		
	Foreign Currencies	Exchange Rate	Carrying Amount
<u>Financial assets</u>			
Cash and cash equivalents	SG\$ 1,778,293	0.7482	US\$ 1,330,600
<u>Financial liabilities</u>			
Long-term borrowing	SG\$ 12,936,189	0.7482	US\$ 9,679,451

A hypothetical rate change of 5% is used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates. Based on outstanding foreign currency-denominated monetary items, a 5% weakening of the U.S. dollar against the Singapore dollar would result in a \$0.4 million increase to net loss and decrease to equity for the year ended December 31, 2017.

The significant financial assets and liabilities denominated in foreign currencies as of December 31, 2018 were as follows:

	December 31, 2018		
	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
SG\$	SG\$	2,297,231	0.7335 US\$ 1,685,019
Financial liabilities			
Monetary items			
SG\$	SG\$	13,515,737	0.7335 US\$ 9,914,437

A hypothetical rate change of 5% is used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates. Based on outstanding foreign currency-denominated monetary items, a 5% weakening of the U.S. dollar against the Singapore dollar would result in a \$0.4 million increase to net loss and decrease to equity for the year ended December 31, 2018.

B. Interest Rate Risk

We are exposed to interest rate risk because we have historically borrowed and from time to time may borrow funds at both fixed and floating interest rates. Our interest rate risk was mainly concentrated in the fluctuation of the benchmark interest rates arising from long-term borrowings.

The sensitivity analysis below was determined based on our exposure to interest rates for both derivatives and non-derivative instruments at the end of the reporting period. For floating rate liabilities, the analysis was prepared assuming the amount of the liability outstanding at the end of the reporting period was outstanding for the whole year. A hypothetical 100 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates. A 100 basis points increase in interest rates with all other variables held constant would result in a \$0.1 million increase to our net loss and decrease to equity for the years ended December 31, 2017 and for 2018.

Item 12. Description of Securities Other than Equity Securities.

A. Debt Securities.

Not applicable.

B. Warrants and Rights.

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares.

JPMorgan Chase Bank, N.A., or JPMorgan, as depositary bank, registers and delivers our American Depositary Shares, also referred to as ADSs. Each ADS will represent an ownership interest in a designated number of our ordinary shares which we will deposit with the depositary or the custodian, as agent of the depositary, under the deposit agreement among ourselves, the depositary and yourself as an ADR holder. In the future, each ADS will also represent any securities, cash or other property deposited with the depositary but which have not distributed directly to you. Unless certificated ADRs are specifically requested by you, all ADSs will be issued on the books of our depositary in book-entry form and periodic statements will be mailed to you which reflect your ownership interest in such ADSs. In our description, references to American depositary receipts or ADRs shall include the statements you will receive which reflect your ownership of ADSs. The depositary's office is located at 4 New York Plaza, Floor 12, New York, NY, 10004. A form of the deposit agreement is incorporated by reference as an exhibit to this Annual Report.

Fees and Expenses

The depositary may charge each person to whom ADSs are issued, including, without limitation, issuances against deposits of ordinary shares, issuances in respect of share distributions, rights and other distributions, issuances pursuant to a stock dividend or stock split declared by us or issuances pursuant to a merger, exchange of securities or any other transaction or event affecting the ADSs or deposited securities, and each person surrendering ADSs for withdrawal of deposited securities or whose ADRs are cancelled or reduced for any other reason, \$5.00 for each 100 ADSs (or any portion thereof) issued, delivered, reduced, cancelled or surrendered, as the case may be. The depositary may sell (by public or private sale) sufficient securities and property received in respect of a share distribution, rights and/or other distributions prior to such deposit to pay such charge.

The following additional charges shall be incurred by the ADR holders, by any party depositing or withdrawing shares or by any party surrendering ADSs and/or to whom ADSs are issued (including, without limitation, issuances pursuant to a stock dividend or stock split declared by us or an exchange of stock regarding the ADSs or the deposited securities or a distribution of ADSs), whichever is applicable:

- a fee of up to \$0.05 per ADS for any cash distribution made pursuant to the deposit agreement;
- an aggregate fee of \$0.05 per ADS per calendar year (or portion thereof) for services performed by the depositary in administering the ADRs (which fee may be charged on a periodic basis during

each calendar year and shall be assessed against holders of ADRs as of the record date or record dates set by the depositary during each calendar year and shall be payable in the manner described in the next succeeding provision);

- a fee for the reimbursement of such fees, charges and expenses as are incurred by the depositary and/or any of its agents (including, without limitation, the custodian and expenses incurred on behalf of ADR holders in connection with compliance with foreign exchange control regulations or any law or regulation relating to foreign investment) in connection with the servicing of the ordinary shares or other deposited securities, the sale of securities (including, without limitation, deposited securities), the delivery of deposited securities or otherwise in connection with the depositary's or its custodian's compliance with applicable law, rule or regulation (which fees and charges shall be assessed on a proportionate basis against ADR holders as of the record date or dates set by the depositary and shall be payable at the sole discretion of the depositary by billing such ADR holders or by deducting such charge from one or more cash dividends or other cash distributions);
- a fee for the distribution of securities (or the sale of securities in connection with a distribution), such fee being in an amount equal to the \$0.05 per ADS issuance fee for the execution and delivery of ADSs which would have been charged as a result of the deposit of such securities (treating all such securities as if they were ordinary shares) but which securities or the net cash proceeds from the sale thereof are instead distributed by the depositary to those ADR holders entitled thereto;
- stock transfer or other taxes and other governmental charges;
- SWIFT, cable, telex and facsimile transmission and delivery charges incurred at your request in connection with the deposit or delivery of shares, ADRs or deposited securities;
- transfer or registration fees for the registration or transfer of deposited securities on any applicable register in connection with the deposit or withdrawal of deposited securities;
- expenses of the depositary in connection with the sale of shares to pay ROC withholdings taxes on stock dividends pursuant to the deposit agreement (which are paid out of such foreign currency);
- in connection with the conversion of foreign currency into U.S. dollars, JPMorgan shall deduct out of such foreign currency the fees, expenses and other charges charged by it and/or its agent (which may be a division, branch or affiliate) so appointed in connection with such conversion; and
- fees of any division, branch or affiliate of JPMorgan utilized to direct, manage and/or execute any public and/or private sale of securities under the deposit agreement.

Certain of the depositary fees and charges described above may become payable immediately after the closing of the initial issuance of ADRs at or following the date of the deposit agreement. In connection therewith, it is anticipated that the \$0.05 per ADS administrative servicing fee per calendar year described in the second bullet above will be charged to, and payable by, those ADS holders on a record date occurring during the period immediately after the initial issuance of ADRs following the date of the deposit agreement and prior to the listing approval from the TPEx with respect to such issuance.

As an ADR holder, you will also be responsible to pay any required charges to the Taiwan tax authority, which are subject to change. As of the date hereof, the charges may include:

Service	Fee
Issuance of ADSs upon a deposit of ordinary shares	0.3% of the aggregate price of ADS issued
Withdrawal of ordinary shares upon cancellation of ADSs	0.3% of the aggregate price of ADS canceled
Sale of ordinary shares on the Taiwan Exchange	3% of the aggregate price of ordinary shares sold

JPMorgan and/or its agent may act as principal for any conversion of foreign currency. For further details see <https://www.adr.com>.

We will pay all other charges and expenses of the depositary and any agent of the depositary (except the custodian) pursuant to agreements from time to time between us and the depositary. The charges described above may be amended from time to time by agreement between us and the depositary. The right of the depositary to receive payment of fees, charges and expenses as provided above shall survive the termination of the deposit agreement.

The depositary anticipates reimbursing us for certain expenses incurred by us that are related to the establishment and maintenance of the ADR program upon such terms and conditions as we and the depositary may agree from time to time. The depositary may make available to us a set amount or a portion of the depositary fees charged in respect of the ADR program or otherwise upon such terms and conditions as we and the depositary may agree from time to time. The depositary collects its fees for issuance and cancellation of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions, or by directly billing investors, or by charging the book-entry system accounts of participants acting for them. The depositary will generally set off the amounts owing from distributions made to holders of ADSs. If, however, no distribution exists and payment owing is not timely received by the depositary, the depositary may refuse to provide any further services to holders that have not paid those fees and expenses owing until such fees and expenses have been paid. At the discretion of the depositary, all fees and charges owing under the deposit agreement are due in advance and/or when declared owing by the depositary.

Payment of Taxes

If any taxes or other governmental charges (including any penalties and/or interest) shall become payable by or on behalf of the custodian or the depositary with respect to any ADR, any deposited securities represented by the ADSs evidenced thereby or any distribution thereon, such tax or other governmental charge shall be paid by the ADR holders to the depositary and by holding or having held an ADR the holder thereof and all prior holders thereof, jointly and severally, agree to indemnify, defend and save harmless each of the depositary and its agents in respect thereof. If an ADR holder owes any tax or other governmental charge, the depositary may (i) deduct the amount thereof from any distributions, or (ii) sell deposited securities (by public or private sale) and deduct the amount owing from the net proceeds of such sale. In either case the ADR holder remains liable for any shortfall. If any tax or governmental charge is unpaid, the depositary may also refuse to effect any registration, registration of transfer, split-up

or combination of ADRs or withdrawal of deposited securities until such payment is made. If any tax or governmental charge is required to be withheld on any cash distribution, the depositary may deduct the amount required to be withheld from any cash distribution or, in the case of a non-cash distribution, sell the distributed property or securities (by public or private sale) in such amounts and in such manner as the depositary deems necessary and practicable to pay such taxes and shall distribute any remaining net proceeds or the balance of any such property after deduction of such taxes to the ADR holders entitled thereto.

Notwithstanding the above, we will pay all stamp duties and other similar duties or taxes payable in the Cayman Islands, the ROC, the United States of America and any other jurisdiction, on or in connection with the constitution and issue of the ADSs and the execution or other event concerning the deposit agreement. If any legal proceedings are taken to enforce our obligations under the deposit agreement or the ADSs and for the purpose of such proceedings any of them are required to be taken into or enforced in any jurisdiction and stamp duties or other similar duties or taxes become payable in connection with such proceedings in such jurisdiction, the ADR holders will pay (or reimburse the person making a valid payment of) all such stamp duties and other similar duties and taxes, including any penalties and interest, unless otherwise ordered by a court of competent jurisdiction in such proceedings. The depositary may sell any deposited securities and cancel ADSs with respect thereof in order to pay any such stamp duties or other similar duties or taxes owed under the deposit agreement by ADR holders without the depositary being required to request payment thereof from the ADR holders.

By holding an ADR or an interest therein, you will be agreeing to indemnify us, the depositary, its custodian and any of our or their respective officers, directors, employees, agents and affiliates against, and hold each of them harmless from, any claims by any governmental authority with respect to taxes, additions to tax, penalties or interest arising out of any refund of taxes, reduced rate of withholding at source or other tax benefit obtained, and such obligations shall survive the transfer or surrender of ADSs or the termination of the deposit agreement.

Reclassifications, Recapitalizations and Mergers

If we take certain actions that affect the deposited securities, including (i) any change in par value, split-up, consolidation, cancellation or other reclassification of deposited securities or (ii) any distributions of ordinary shares or other property not made to holders of ADRs or (iii) any recapitalization, reorganization, merger, consolidation, liquidation, receivership, bankruptcy or sale of all or substantially all of our assets, then the depositary may choose to, and shall if reasonably requested by us:

- (1) amend the form of ADR;
- (2) distribute additional or amended ADRs;
- (3) distribute cash, securities or other property it has received in connection with such actions;
- (4) sell by public or private sale any securities or property received; or
- (5) none of the above.

If the depositary does not choose any of the above options, any of the cash, securities or other property it receives will constitute part of the deposited securities and each ADS will then represent a proportionate interest in such property.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies.

Not applicable.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds.

Not applicable.

Item 15. Controls and Procedures.

A. Disclosure Controls and Procedures.

Our management, with the participation of our Chief Executive Officer and Vice President of Finance, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of December 31, 2018. Based on such evaluation, our Chief Executive Officer and Vice President of Finance have concluded that, as of December 31, 2018, our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

B. Management's annual report on internal control over financial reporting.

This annual report does not include a report of management's assessment regarding internal control over financial reporting due to a transition period established by rules of the Securities and Exchange Commission for newly public companies.

C. Attestation report of the registered public accounting firm.

This annual report does not include an attestation report of the company's registered public accounting firm due to a transition period established by rules of the Securities and Exchange Commission for newly public companies.

D. Changes in internal control over financial reporting.

There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) that occurred during the period covered by this Annual Report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 16A. Audit committee financial expert.

Our Audit Committee is comprised of three of our non-executive directors, Mr. Howden, Mr. Hoffman and Mr. Sun. The audit committee consists exclusively of "independent directors" as such term is defined in Rule 10A-3 under the Exchange Act and under the listing standards of the Nasdaq Stock Market. Mr. Sun serves as chair of this committee. Our Board has determined that Mr. Sun is an "audit committee financial expert" as defined in Item 16A of Form 20-F.

Item 16B. Code of Ethics.

We have adopted a Code of Business Conduct that covers a broad range of matters including the handling of conflicts of interest, compliance issues and other corporate policies. Our Code of Business Conduct is applicable to all of our employees, officers and directors, including our principal executive officer, principal financial officer, principal accounting officer or controller, and persons performing similar functions. We have posted a copy of our Code of Business Conduct on our website at <http://ir.aslanpharma.com/corporate-governance/highlights>. We expect that any amendment to this code, or any waivers of its requirements, will be disclosed on our website and approved by board of directors. Information contained on, or that can be accessed through, our website is not incorporated by reference into this annual report. See “Item 6.C. Directors, Senior Management and Employees— Code of Business Conduct and Ethics” for more information.

Item 16C. Principal Accountant Fees and Services.

The table below summarizes the fees that we paid for services provided by Deloitte & Touche and its affiliated firms (the “Deloitte Entities”) for the years ended December 31, 2017 and 2018. All audit and non-audit services provided by Deloitte & Touche were pre-approved by our audit committee paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X, entitled “Audit Committee Administration of the Engagement”.

Fee Category	Year Ended December 31,	
	2017	2018
	(in thousands)	
Audit fees	\$ 124	\$ 404
Audit-related fees	—	—
Tax fees	—	—
All other fees	—	—
Total	\$ 124	\$ 404

Audit Fees. This category includes the audit of our annual financial statements, review of quarterly financial statements and services that are normally provided by the independent auditors in connection with statutory and regulatory filings or engagements for those fiscal years. This category also includes advice on audit and accounting matters that arose during, or as a result of, the audit or the review of quarterly financial statements and statutory audits required by U.S. jurisdictions and non-U.S. jurisdictions and also IPO service fees occurred in the fiscal year if applicable.

Audit Committee Pre-Approval Policies and Procedures

Our audit committee reviews and pre-approves the scope and the cost of audit services related to us and permissible non-audit services performed by the independent auditors, other than those for *de minimis* services which are approved by the audit committee prior to the completion of the audit. All of the services related to our company provided by Deloitte & Touche during the last fiscal year have been approved by the audit committee.

Item 16D. Exemptions from the Listing Standards for Audit Committees.

Not applicable.

Item 16E Purchases of Equity Securities by the Issuer and Affiliated Purchasers.

Not applicable.

Item 16F. Change in Registrant's Certifying Accountant.

Not applicable.

Item 16G. Corporate Governance

We are a "foreign private issuer," as defined by the SEC. As a result, in accordance with the rules and regulations of The Nasdaq Stock Market LLC, or Nasdaq, we comply with home country governance requirements and certain exemptions thereunder rather than complying with Nasdaq corporate governance standards. While we voluntarily follow most Nasdaq corporate governance rules, we may choose to take advantage of the following exemptions afforded to foreign private issuers:

- Exemption from the requirement that a majority of our board of directors consists of independent directors.
- Exemption from the requirement that our audit committee have a written charter addressing the audit committee's responsibilities and authority as set forth in Nasdaq Rule 5605(c)(1).
- Exemption from the requirement that our remuneration committee have a written charter addressing the remuneration committee's responsibilities and authority as set forth in Nasdaq Rule 5605(d).
- Exemption from the requirement to have independent director oversight of director nominations and a formal written charter or board resolution addressing the nominations process as set forth in Nasdaq Rule 5605(e).
- Exemption from the requirement that we have a code of conduct applicable to all directors, officers and employees and from any requirement that we have a code of conduct in compliance with Section 406 of the Sarbanes-Oxley Act of 2002.
- Exemption from the Nasdaq rules applicable to domestic issuers requiring disclosure within four business days of any determination to grant a waiver of the code of business conduct and ethics to directors and officers. Although we will require board approval of any such waiver, we may choose not to disclose the waiver in the manner set forth in the Nasdaq rules, as permitted by the foreign private issuer exemption.
- Exemption from the requirement to obtain shareholder approval for certain issuances of securities, including shareholder approval of stock option plans.
- Exemption from the requirements governing the review and oversight of all "related party transactions," as defined in Item 7.B of Form 20-F.
- Exemption from the requirement that our board of directors shall have regularly scheduled meetings at which only independent directors are present as set forth in Nasdaq Rule 5605(b)(2).

We intend to follow our home country practices in lieu of the foregoing requirements. Although we may rely on home country corporate governance practices in lieu of certain of the rules in the Nasdaq Rule 5600 Series and Rule 5250(d), we must comply with Nasdaq's Notification of Noncompliance requirement (Rule 5625), the Voting Rights requirement (Rule 5640) and have an audit committee that satisfies Rule 5605(c)(3), consisting of committee members that meet the independence requirements of Rule 5605(c)(2)(A)(ii). Although we currently intend to comply with the Nasdaq corporate governance rules applicable other than as noted above, we may in the future decide to use the foreign private issuer exemption with respect to some or all the other Nasdaq corporate governance rules.

In addition, as a foreign private issuer, we take advantage of the following exemptions from SEC reporting obligations:

- Exemption from filing quarterly reports on Form 10-Q or provide current reports on Form 8-K, disclosing significant events within four days of their occurrence.
- Exemption from Section 16 rules regarding sales of common shares by insiders, which will provide less data in this regard than shareholders of U.S. companies that are subject to the Exchange Act.

Accordingly, our shareholders will not have the same protections afforded to shareholders of companies that are subject to all of the corporate governance requirements of Nasdaq and the domestic reporting requirements of the SEC. We may utilize these exemptions for as long as we continue to qualify as a foreign private issuer.

Item 16H. Mine Safety Disclosure

Not applicable.

PART III

Item 17. Financial Statements.

See pages F-1 through F-44 of this Annual Report on Form 20-F.

Item 18. Financial Statements.

The financial statements are filed as part of this Annual Report beginning on page F-1.

Item 19. Exhibits.

List all exhibits filed as part of the registration statement or annual report, including exhibits incorporated by reference.

EXHIBIT INDEX

Exhibit	Description	Incorporated by Reference			
		Schedule/ Form	File Number	Exhibit	File Date
1.1*	Sixth Amended and Restated Memorandum and Articles of Association of the Registrant, as currently in effect.				
2.1	Form of Deposit Agreement (incorporated by reference to Exhibit A to the Registrant's Form F-6 filed with the Securities and Exchange Commission on April 13, 2018).	F-6	333-224273	EX-99.A	04/13/2018
2.2	Form of American Depositary Receipt (included in Exhibit 2.1)	F-6	333-224273	EX-99.A	04/13/2018
4.1†	ASLAN Pharmaceuticals Limited 2014 Employee Share Option Scheme Plan.	F-1	333-223920	10.1	03/26/2018
4.2†	ASLAN Pharmaceuticals Limited 2017 Employee Share Option Plan 1.	F-1	333-223920	10.2	03/26/2018
4.3†	ASLAN Pharmaceuticals Pte. Ltd. 2017 SMT Long Term Incentive Plan.	F-1	333-223920	10.3	03/26/2018
4.4#	License Agreement, dated January 3, 2018, by and between ASLAN Pharmaceuticals Pte. Ltd. and Array BioPharma Inc.	F-1	333-223920	10.4	03/26/2018
4.5#	Amended Development and License Agreement, dated December 21, 2015, by and between ASLAN Pharmaceuticals Pte. Ltd. and Almirall, S.A., as amended.	F-1	333-223920	10.5	03/26/2018
4.6#	License Agreement, dated May 12, 2014, by and between ASLAN Pharmaceuticals Pte. Ltd. and CSL Limited, as amended.	F-1	333-223920	10.6	03/26/2018
4.7#	Agreement Amendment No. 1 to License Agreement, dated September 18, 2018, by and between ASLAN Pharmaceuticals PTE. Ltd. and CSL Limited.	6-K	001-38475	10.1	01/09/2019
4.8	Tenancy Agreement in Respect of Unit #12-03 83, Clemenceau Avenue, UE Square, Singapore 239920, dated July 25, 2016, by and between ASLAN Pharmaceuticals Pte. Ltd. and United Engineers Limited.	F-1	333-223920	10.8	03/26/2018
4.9†	Form of Indemnity Agreement by and between ASLAN Pharmaceuticals Limited and each director and executive officer.	F-1/A	333-223920	10.9	04/16/2018

- 4.10*+ [License Agreement, dated February 27, 2019, by and between ASLAN Pharmaceuticals Pte. Ltd. and BioGenetics Co., Ltd.](#)
- 4.11*+ [License Agreement, dated March 11, 2019, by and between ASLAN Pharmaceuticals Pte. Ltd. and BioGenetics Co., Ltd.](#)
- 8.1* [Subsidiaries of the registrant.](#)
- 12.1* [Certification by the Principal Executive Officer pursuant to Securities Exchange Act Rules 13a-14\(a\) and 15d-14\(a\) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)
- 12.2* [Certification by the Principal Financial Officer pursuant to Securities Exchange Act Rules 13a-14\(a\) and 15d-14\(a\) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)
- 13.1** [Certification by the Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)
- 13.2** [Certification by the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)
- 101.INS* XBRL Instance Document
- 101.SCH* XBRL Taxonomy Extension Schema Document
- 101.CAL* XBRL Taxonomy Extension Calculation Linkbase Document
- 101.DEF* XBRL Taxonomy Extension Definition Linkbase Document
- 101.LAB* XBRL Taxonomy Extension Label Linkbase Document
- 101.PRE* XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

** Furnished herewith.

† Indicates a management contract or any compensatory plan, contract or arrangement.

Confidential treatment has been granted from the Securities and Exchange Commission as to certain portions of this document.

+ Certain portions of this exhibit (indicated by “[***]”) have been omitted as the Company has determined (i) the omitted information is not material and (ii) the omitted information would likely cause harm to the Company if publicly disclosed.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this registration statement Annual Report on its behalf.

ASLAN PHARMACEUTICALS LIMITED

Date: April 29, 2019

By: _____ /s/ Carl Firth, Ph.D.
Carl Firth, Ph.D.
Chief Executive Officer and Chairman

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of
ASLAN Pharmaceuticals Limited

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of ASLAN Pharmaceuticals Limited (the “Company”) and its subsidiaries (collectively referred to as the “Group”) as of December 31, 2017 and 2018, and the related consolidated statements of comprehensive loss, changes in equity and cash flows for each of the three years in the period ended December 31, 2018 and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Group as of December 31, 2017 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

These financial statements are the responsibility of the Group’s management. Our responsibility is to express an opinion on the Group’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Group is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Group’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche
Deloitte & Touche
Taipei, Taiwan
Republic of China

April 29, 2019

We have served as the Group’s auditor since 2014.

ASLAN PHARMACEUTICALS LIMITED AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

DECEMBER 31, 2017 AND 2018

(In U.S. Dollars)

	<u>2017</u>	<u>2018</u>
	<u>Amount</u>	<u>Amount</u>
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents (Notes 4 and 6)	\$ 50,573,211	\$ 28,908,901
Prepayments	71,946	183,599
Total current assets	<u>50,645,157</u>	<u>29,092,500</u>
NON-CURRENT ASSETS		
Financial assets at fair value through profit or loss (Notes 4, 7 and 15)	—	60,004
Financial assets at fair value through other comprehensive income (Notes 4, 8 and 15)	—	187,244
Property, plant and equipment (Notes 4 and 9)	443,566	288,418
Intangible assets (Notes 4, 5, 10 and 15)	84,052	23,080,592
Refundable deposits	160,947	172,080
Total non-current assets	<u>688,565</u>	<u>23,788,338</u>
TOTAL ASSETS	<u>\$ 51,333,722</u>	<u>\$ 52,880,838</u>
LIABILITIES AND EQUITY		
CURRENT LIABILITIES		
Trade payables	\$ 3,898,291	\$ 5,315,737
Other payables (Notes 11 and 19)	2,080,544	2,682,661
Total current liabilities	<u>5,978,835</u>	<u>7,998,398</u>
NON-CURRENT LIABILITIES		
Long-term borrowings (Note 12)	9,679,451	13,974,794
Other non-current liabilities (Note 19)	162,000	289,613
Total non-current liabilities	<u>9,841,451</u>	<u>14,264,407</u>
Total liabilities	<u>15,820,286</u>	<u>22,262,805</u>
EQUITY (Note 14)		
Ordinary shares	41,514,016	51,627,219
Capital surplus	84,282,681	111,459,672
Accumulated deficits	(90,283,261)	(132,468,858)
Total equity	<u>35,513,436</u>	<u>30,618,033</u>
TOTAL LIABILITIES AND EQUITY	<u>\$ 51,333,722</u>	<u>\$ 52,880,838</u>

The accompanying notes are an integral part of the consolidated financial statements.

ASLAN PHARMACEUTICALS LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS FOR THE YEARS ENDED DECEMBER 31, 2016, 2017 AND 2018 (In U.S. Dollars)

	<u>2016</u>	<u>2017</u>	<u>2018</u>
	<u>Amount</u>	<u>Amount</u>	<u>Amount</u>
NET REVENUE (Notes 3, 4, 15 and 24)	\$ 11,546,971	\$ —	\$ —
COST OF REVENUE (Note 15)	(125,000)	—	—
OPERATING EXPENSES (Notes 13, 16 and 19)			
General and administrative expenses	(6,956,345)	(8,758,710)	(10,513,707)
Research and development expenses	(13,165,286)	(30,381,016)	(31,834,364)
LOSS FROM OPERATIONS	<u>(8,699,660)</u>	<u>(39,139,726)</u>	<u>(42,348,071)</u>
NON-OPERATING INCOME AND EXPENSES			
Interest income	47,223	363,137	268,330
Other income (Note 15)	—	—	187,244
Other gains and losses (Note 16)	127,472	(698,691)	213,243
Finance costs (Notes 4 and 16)	<u>(524,138)</u>	<u>(416,698)</u>	<u>(491,904)</u>
Total non-operating income and expenses	<u>(349,443)</u>	<u>(752,252)</u>	<u>176,913</u>
LOSS BEFORE INCOME TAX	<u>(9,049,103)</u>	<u>(39,891,978)</u>	<u>(42,171,158)</u>
INCOME TAX EXPENSE (Notes 4, 5 and 17)	—	—	(14,439)
NET LOSS FOR THE YEAR	<u>(9,049,103)</u>	<u>(39,891,978)</u>	<u>(42,185,597)</u>
TOTAL COMPREHENSIVE LOSS FOR THE YEAR	<u>\$ (9,049,103)</u>	<u>\$ (39,891,978)</u>	<u>\$ (42,185,597)</u>
LOSS PER SHARE (Note 18)			
Basic and diluted	<u>\$ (0.09)</u>	<u>\$ (0.32)</u>	<u>\$ (0.28)</u>

The accompanying notes are an integral part of the consolidated financial statements.

ASLAN PHARMACEUTICALS LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY FOR THE YEARS ENDED DECEMBER 31, 2016, 2017 AND 2018

(In U.S. Dollars)

	Ordinary Shares (Note 14)		Preference Shares (Note 14)		Capital Surplus (Note 14)			Accumulated	
	Shares	Amount	Shares	Amount	Ordinary Shares	Share Options	Total	Deficits	Total Equity
						Reserve			
BALANCE AT JANUARY 1, 2016	12,775,002	\$ 6,388	73,504,898	3,296	\$ —	\$ 3,716,905	\$ 3,716,905	\$ (41,342,180)	\$ (37,615,591)
Issuance of preference shares	—	—	9,723,896	—	—	—	—	—	—
Conversion to ordinary shares from preference shares	83,228,794	41,614	(83,228,794)	(3,296)	64,557,452	—	64,557,452	—	64,595,770
Adjustment of par value to NT\$10 (US\$0.6383)	—	30,639,655	—	—	(30,639,655)	—	(30,639,655)	—	—
Issuance of new share capital (Notes 14 and 19)	19,667,144	6,022,409	—	—	16,201,460	—	16,201,460	—	22,223,869
Recognition of employee share options by the Company (Note 19)	—	—	—	—	—	1,419,923	1,419,923	—	1,419,923
Net loss for the year ended December 31, 2016	—	—	—	—	—	—	—	(9,049,103)	(9,049,103)
Total comprehensive loss for the year ended December 31, 2016	—	—	—	—	—	—	—	(9,049,103)	(9,049,103)
BALANCE AT DECEMBER 31, 2016	115,670,940	36,710,066	—	—	50,119,257	5,136,828	55,256,085	(50,391,283)	41,574,868
Issuance of new share capital (Notes 14 and 19)	14,458,000	4,803,950	—	—	28,265,033	(8,032)	28,257,001	—	33,060,951
Recognition of employee share options by the Company (Note 19)	—	—	—	—	—	769,595	769,595	—	769,595
Net loss for the year ended December 31, 2017	—	—	—	—	—	—	—	(39,891,978)	(39,891,978)
Total comprehensive loss for the year ended December 31, 2017	—	—	—	—	—	—	—	(39,891,978)	(39,891,978)
BALANCE AT DECEMBER 31, 2017	130,128,940	41,514,016	—	—	78,384,290	5,898,391	84,282,681	(90,283,261)	35,513,436
Issuance of new share capital (Note 14)	30,000,000	10,073,977	—	—	32,106,023	—	32,106,023	—	42,180,000
Transaction costs attributable to the issuance of ordinary shares	—	—	—	—	(5,388,866)	—	(5,388,866)	—	(5,388,866)
Issuance of ordinary shares under employee share option plan (Note 19)	120,000	39,226	—	—	41,915	(33,141)	8,774	—	48,000
Recognition of employee share options by the Company (Note 19)	—	—	—	—	—	451,060	451,060	—	451,060
Net loss for the year ended December 31, 2018	—	—	—	—	—	—	—	(42,185,597)	(42,185,597)
Total comprehensive loss for the year ended December 31, 2018	—	—	—	—	—	—	—	(42,185,597)	(42,185,597)
BALANCE AT DECEMBER 31, 2018	160,248,940	\$ 51,627,219	—	\$ —	\$ 105,143,362	\$ 6,316,310	\$ 111,459,672	\$ (132,468,858)	\$ 30,618,033

The accompanying notes are an integral part of the consolidated financial statements.

ASLAN PHARMACEUTICALS LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2016, 2017 AND 2018

(In U.S. Dollars)

	2016	2017	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Loss before income tax	\$ (9,049,103)	\$ (39,891,978)	\$ (42,171,158)
Adjustments for:			
Depreciation expenses	65,874	200,918	235,410
Amortization expenses	10,010	9,058	6,355
Finance costs	524,138	416,698	491,904
Interest income	(47,223)	(363,137)	(268,330)
Compensation costs of share-based payment transactions	1,419,923	1,126,595	1,289,737
Loss on disposal of property, plant and equipment	12,316	31,337	—
Unrealized (gain) loss on foreign exchange, net	(206,334)	698,608	(256,918)
Gain on disposal of licensed rights	—	—	(187,244)
Changes in operating assets and liabilities			
Increase in financial assets mandatorily classified as at fair value through profit or loss	—	—	(60,004)
(Increase) decrease in accounts receivable	(1,294,034)	1,294,034	—
(Increase) decrease in prepayments	(52,034)	17,636	(111,653)
Increase in trade payables	2,129,760	1,621,449	1,417,446
Increase (decrease) in other payables	688,372	358,787	(108,947)
Cash used in operations	(5,798,335)	(34,479,995)	(39,723,402)
Interest received	47,223	363,137	268,330
Interest paid	(38,036)	—	—
Income tax paid	—	—	(14,439)
Net cash used in operating activities	(5,789,148)	(34,116,858)	(39,469,511)
CASH FLOWS FROM INVESTING ACTIVITIES			
Payments for property, plant and equipment	(374,425)	(291,432)	(80,262)
Proceeds from disposal of property, plant and equipment	632	—	—
Payments for intangible assets	(81,209)	(8,844)	(23,002,895)
Increase in refundable deposits	(68,474)	(36,168)	(11,133)
Net cash used in investing activities	(523,476)	(336,444)	(23,094,290)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from long-term borrowings	—	228,514	4,060,357
Repayments of long-term borrowings	(376,968)	—	—
Issuance of preference shares	9,140,462	—	—
Proceeds from new share capital	22,223,869	33,060,951	42,180,000
Proceeds from exercise of employee share options	—	—	48,000
Payments for transaction costs attributable to the issuance of ordinary shares	—	—	(5,388,866)
Net cash generated from financing activities	30,987,363	33,289,465	40,899,491
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	24,674,739	(1,163,837)	(21,664,310)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	27,062,309	51,737,048	50,573,211
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	\$ 51,737,048	\$ 50,573,211	\$ 28,908,901

The accompanying notes are an integral part of the consolidated financial statements.

ASLAN PHARMACEUTICALS LIMITED AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2016, 2017 AND 2018

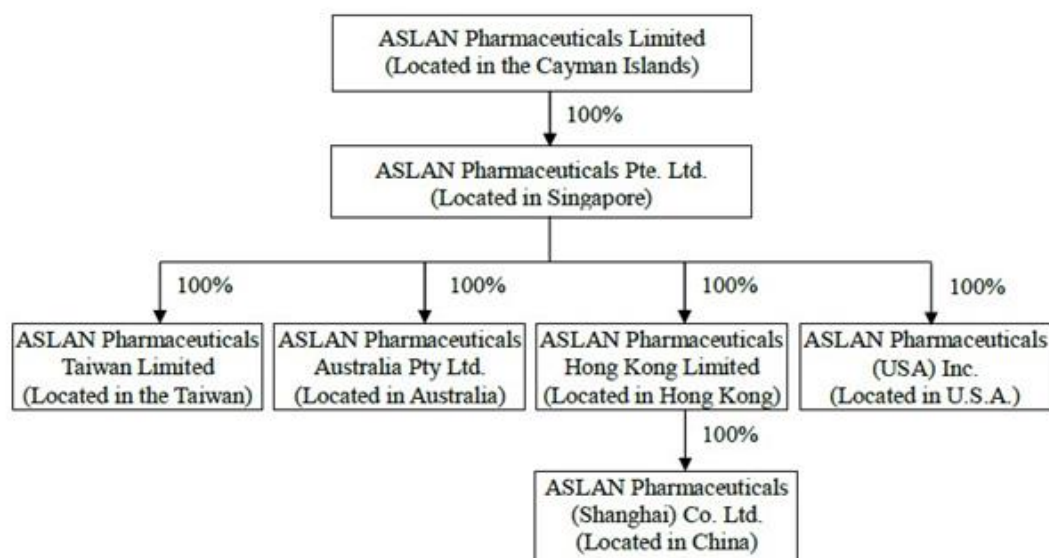
(In U.S. Dollars, Unless Stated Otherwise)

1. GENERAL INFORMATION

ASLAN Pharmaceuticals Limited (the “Company”) was incorporated in the Cayman Islands in June 2014 as the listing vehicle for the initial public offering and listing on the Taipei Exchange (“TPEX”) in Taiwan. The Company and its subsidiaries (collectively referred to as the “Group”) are principally engaged in the development of novel drugs for Asia prevalent cancers.

The main businesses and intragroup relationships of the Group were as follows as of December 31, 2018:

Name	Place of Incorporation	Date of Incorporation	Main Business
ASLAN Pharmaceuticals Limited	Cayman Islands	June 2014	Investment holding
ASLAN Pharmaceuticals Pte. Ltd.	Singapore	April 2010	New drug research and development
ASLAN Pharmaceuticals Taiwan Limited	Taiwan	November 2013	New drug research and development
ASLAN Pharmaceuticals Australia Pty Ltd.	Australia	July 2014	New drug research and development
ASLAN Pharmaceuticals Hong Kong Limited	Hong Kong	July 2015	New drug research and development
ASLAN Pharmaceuticals (Shanghai) Co. Ltd.	China	May 2016	New drug research and development
ASLAN Pharmaceuticals (USA) Inc.	United States of America	October 2018	New drug research and development



Following the approval of the Company's shareholders at a shareholders' meeting on May 27, 2016, the Company completed a restructuring of its share capital through the subdivision of the Company's authorized share capital, the conversion of preference shares into ordinary shares, and the repurchase of its USD shares in consideration for the issue of an equal number of NTD shares for the purpose of the initial public offering and listing of the Company's ordinary shares on the TPEX. On January 5, 2017, the General Stock Board Applicant Committee of the General Stock Board (Market) of the TPEX approved the Company's application for listing on the TPEX.

On January 20, 2017, the 8th session 22nd meeting of the board and supervisors of the TPEX passed a resolution, pursuant to which the Company's shares began trading on the TPEX on June 1, 2017. In addition, the Company's American Depository Shares ("ADSs") representing ordinary shares have been listed on the Nasdaq Global Market since May 4, 2018.

The reporting currency of the Group is the U.S. dollar. The functional currency of the majority of the Group's entities is the U.S. dollar.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the board of directors on April 26, 2019.

3. APPLICATION OF NEW, AMENDED AND REVISED STANDARDS AND INTERPRETATIONS

- a. Amendments to the International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB") mandatorily effective for the current year

The Company has applied the amendments to IFRSs included in IFRS 9 "Financial Instruments", IFRS 15 "Revenue from Contracts with Customers", Amendment to IFRS 2 "Classification and Measurement of Share-based Payment Transactions", Amendments to IAS 40 "Transfers of Investment Property", Annual Improvement to IFRSs 2014-2016 Cycle, and IFRIC 22 "Foreign Currency Transactions and Advance Consideration" for the annual period that began on or after January 1, 2018.

The adoption and impact of these standards from January 1, 2018 are described as below and the new accounting policies are disclosed in Note 4. The other standards did not have material impact on the Group's accounting policies.

IFRS 15 "Revenue from Contracts with Customers" and related amendments

IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers and supersedes IAS 18 "Revenue", IAS 11 "Construction Contracts" and a number of revenue-related interpretations.

Under IFRS 15, 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. Prior to the application of IFRS 15, the Group recognized revenue when the Group transferred the significant risks and rewards of ownership to the buyer.

IFRS 15 provides guidance to clarify the categorization of licenses of intellectual property and on whether revenue is to be recognized over time or at a point in time. Under IFRS 15, when the nature of the Group's promise in granting a license is to provide a right to access the Group's intellectual property, revenue is recognized over time if all of the following criteria are met. Otherwise, the promise is to provide a right to use the Group's intellectual property as it exists at the point in time at which the license is granted and revenue is recognized when the license is transferred.

- 1) The contract requires, or the customer reasonably expects, the Group to undertake activities that significantly affect the intellectual property to which the customer has rights.
- 2) The rights granted by the license directly expose the customer to any positive or negative effects of the above activities.
- 3) Those activities do not result in the transfer of a good or a service to the customer as the activities occur.

Prior to the application of IFRS 15, license fees and royalties paid for the use of the Group's assets are normally recognized in accordance with the substance of the agreement. An assignment of rights for a fixed fee or non-refundable guarantee under a non-cancellable contract which permits the licensee to exploit those rights freely and the Group has no remaining obligations to perform is, in substance, a sale. In such cases, revenue is recognized at the time of sale. Otherwise, revenue is recognized on a straight-line basis over the life of the agreement. In some cases, whether or not a license fee or royalty will be received is contingent on the occurrence of a future event. In such cases, revenue is recognized only when it is probable that the license fee or royalty will be received, which is normally when the event has occurred.

The Group elected only to retrospectively apply IFRS 15 to contracts that were not complete as of January 1, 2018. The Group had no cumulative effect of retrospectively applying IFRS 15 in the retained earnings on January 1, 2018, and the Group does not have any revenue from contracts with customers that are within scope of IFRS 15 in 2018.

b. New and revised IFRSs issued but not yet effective

Of the new, amended and revised standards and interpretations (collectively the "New IFRSs") that have been issued but are not yet effective, the Company has not applied the following.

New, Amended or Revised Standards and Interpretations	Effective Date Announced by IASB (Note 1)
Annual Improvements to IFRSs 2015-2017 Cycle	January 1, 2019
Amendments to IFRS 9 "Prepayment Features with Negative Compensation"	January 1, 2019
IFRS 16 "Leases"	January 1, 2019
Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement"	January 1, 2019 (Note 2)
Amendments to IAS 28 "Long-term Interests in Associates and Joint Ventures"	January 1, 2019
IFRIC 23 "Uncertainty over Income Tax Treatments"	January 1, 2019
Amendments to IFRS 3 "Definition of a Business"	January 1, 2020 (Note 3)
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between An Investor and Its Associate or Joint Venture"	To be determined by IASB
IFRS 17 "Insurance Contracts"	January 1, 2021
Amendments to IAS 1 and IAS 8 "Definition of Material"	January 1, 2020 (Note 4)

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The Group shall apply these amendments to plan amendments, curtailments or settlements occurring on or after January 1, 2019.

Note 3: The Group shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 4: The Group shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

The initial application of the above New IFRSs, whenever applied, would not have any material impact on the Group's accounting policies, except for the following:

IFRS 16 "Leases"

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17, IFRIC 4 and a number of related interpretations.

Definition of a lease

Upon initial application of IFRS 16, the Group will elect to apply the guidance of IFRS 16 in determining whether contracts are, or contain, a lease only to contracts entered into (or changed) on or after January 1, 2019. Contracts identified as containing a lease under IAS 17 and IFRIC 4 will not be reassessed and will be accounted for in accordance with the transitional provisions under IFRS 16.

The Group as lessee

Upon initial application of IFRS 16, the Group will recognize right-of-use assets and lease liabilities for all leases on the consolidated balance sheets except for those whose payments under low-value and short-term leases will be recognized as expenses on a straight-line basis. On the consolidated statements of comprehensive income, the Group will present the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the consolidated statements of cash flows, cash payments for the principal portion of lease liabilities will be classified within financing activities; cash payments for the interest portion will be classified within operating activities. Currently, payments under operating lease contracts are recognized as expenses on a straight-line basis. Cash flows for operating leases are classified within operating activities on the consolidated statements of cash flows.

The Group anticipates applying IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized on January 1, 2019. Comparative information will not be restated.

Lease liabilities will be recognized on January 1, 2019 for leases currently classified as operating leases with the application of IAS 17. Lease liabilities will be measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets will be measured at an amount equal to the lease liabilities. The Group will apply IAS 36 to all right-of-use assets.

The Group expects to apply the following practical expedients:

- a) The Group will apply a single discount rate to the leases with reasonably similar characteristics to measure lease liabilities.
- b) The Group will account for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.

- c) The Group will exclude initial direct costs from the measurement of right-of-use assets on January 1, 2019.
- d) The Group will use hindsight, such as in determining lease terms, to measure lease liabilities.

Anticipated impact on assets and liabilities

	Carrying Amount as of December 31, 2018	Adjustments Arising from Initial Application	Adjusted Carrying Amount as of January 1, 2019
Total effect on assets (right-of-use assets)	\$ —	\$ 323,850	\$ 323,850
Lease liabilities - current	\$ —	\$ 219,039	\$ 219,039
Lease liabilities - non-current	\$ —	\$ 104,811	\$ 104,811
Total effect on liabilities		\$ 323,850	

Except for the above impact, as of the date the consolidated financial statements were authorized for issue, the Group is continuously assessing the possible impact that the application of other standards and interpretations will have on the Group's financial position and financial performance and will disclose the relevant impact when the assessment is completed.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Statement of compliance

The accompanying consolidated financial statements have been prepared in conformity with IFRSs issued by the IASB.

b. Basis of preparation

The consolidated financial statements have been prepared on the historical cost basis except for financial instruments and other payable arising from cash-settled share-based payment arrangements which are measured at fair value.

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

c. Classification of current and non-current assets and liabilities

Current assets include:

- 1) Assets held primarily for the purpose of trading;
- 2) Assets expected to be realized within 12 months after the reporting period; and
- 3) Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

Current liabilities include:

- 1) Liabilities held primarily for the purpose of trading;

- 2) Liabilities due to be settled within 12 months after the reporting period; and
- 3) Liabilities for which the Group does not have an unconditional right to defer settlement for at least 12 months after the reporting period.

Assets and liabilities that are not classified as current are classified as non-current.

d. Basis of consolidation

The consolidated financial statements include the financial statements of the Company and its subsidiaries. All intragroup transactions, balances, income and expenses are eliminated in full upon consolidation.

e. Foreign currencies

The reporting currency of the Group is the U.S. dollar. The functional currency of the majority of the Group's entities is the U.S. dollar.

Monetary assets and liabilities denominated in currencies other than the applicable functional currencies are translated into the functional currencies at the prevailing rates of exchange at the balance sheet date. Nonmonetary assets and liabilities are remeasured into the applicable functional currencies at historical exchange rates. Transactions in currencies other than the applicable functional currencies during the year are converted into the functional currencies at the applicable rates of exchange prevailing at the dates of the transactions. Exchange differences are recognized in "other gains and losses, net" in the consolidated statement of comprehensive loss.

f. Property, plant and equipment

Property, plant and equipment are stated at cost, less recognized accumulated depreciation and accumulated impairment loss.

Depreciation is recognized using the straight-line method. Each significant part is depreciated separately. The estimated useful lives, residual values and depreciation methods are reviewed at the end of each reporting period, with the effect of any changes in estimates accounted for on a prospective basis.

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 respective asset and is recognized in the consolidated statement of comprehensive loss.

g. Intangible assets

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost, less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful lives, residual values, and amortization methods are reviewed at the end of each reporting period, with the effect of any changes in estimates accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are measured at cost, less accumulated impairment loss.

2) Internally-generated intangible assets - research and development expenditures

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from the development phase of an internal project is recognized only if all of the following have been demonstrated:

- a) The technical feasibility of completing the intangible asset so that it will be available for use or sale;
- b) The intention to complete the intangible asset and use or sell it;
- c) The ability to use or sell the intangible asset;
- d) The manner in which intangible asset will generate probable future economic benefits;
- e) The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- f) The ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when an intangible asset first meets the recognition criteria listed above. Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

3) Derecognition of intangible assets

On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss.

h. Impairment of tangible and intangible assets

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets in order to determine whether there is any indication that those assets have suffered any impairment loss. If any such indication exists, the recoverable amount of an asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are not subject to amortization, but are tested annually for impairment or more frequently if there are indicators of impairment. In respect of the impairment indicators, the Group considers both internal and external sources of information to determine whether an asset may be impaired, which may include the significant underperformance of the business in relation to expectations, significant negative industry or economic trends, and significant changes or planned changes with adverse effects in the use of the assets, as well as the internal reporting which indicates the economic performance of an asset is worse than expected. If any such indicators exist, the Group will estimate the recoverable amount of such indefinite-lived intangible asset and compare it with its carrying amount. The recoverable amount is the higher of fair value, less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

An impairment loss recognized in prior periods shall be reversed if, and only if, there has been a change in the estimates used to determine the recoverable amount since the last impairment loss was recognized. When an impairment loss is subsequently reversed, the carrying amount of the corresponding asset or cash-generating unit is increased to the revised

estimate of its recoverable amount, but only to the extent of the carrying amount that would have been determined had no impairment loss been recognized on the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in the consolidated statement of comprehensive loss.

i. Financial instruments

Financial assets and financial liabilities are recognized when a group entity becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issuance of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss (i.e., 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.

1) Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis.

a) Measurement categories

2017 (prior to adoption of IFRS 9)

Financial assets are classified into the following categories: Financial assets at FVTPL, held-to-maturity investments, available-for-sale financial assets and loans and receivables. Financial assets held by the Group in 2017 are classified as loans and receivables.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables (including cash and cash equivalents and refundable deposits) are measured using the effective interest method at amortized cost less any impairment.

Cash equivalents include highly liquid investments which are readily convertible to a known amount of cash and subject to an insignificant risk of change in value.

2018 (after adoption of IFRS 9)

Financial assets are classified into the following categories: Financial assets at FVTPL, financial assets at amortized cost and equity instruments at fair value through other comprehensive income (i.e., FVTOCI).

i. Financial assets at FVTPL

Derivative financial assets are classified as at FVTPL when such a financial asset is mandatorily classified as at FVTPL.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 22.

ii. Financial assets at amortized cost

A financial asset shall be measured at amortized cost if both of the following conditions are met:

- i) The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- ii) The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For the financial assets measured at amortized cost (including cash and cash equivalents and refundable deposits), the Group applies the effective interest method to the gross carrying amount at amortized cost less any impairment from initial recognition. Any foreign exchange gains and losses are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of such a financial asset.

Cash equivalents include time deposits, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

iii. Investments in equity instruments at FVTOCI

On initial recognition, the Group may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation as at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments; instead, it will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

b) Impairment of financial assets

2017

Financial assets, other than those at fair value through profit or loss, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial assets, the estimated future cash flows of the investment have been affected.

For financial assets measured at amortized cost, such as accounts receivable, assets are assessed for impairment on a collective basis even if they were assessed not to be impaired individually.

For a financial asset measured at amortized cost, the amount of the impairment loss recognized is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate.

For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment (at the date the impairment is reversed) does not exceed what the amortized cost would have been had the impairment not been recognized.

For all other financial assets, objective evidence of impairment could include significant financial difficulty of the issuer or counterparty, breach of contract, such as a default or delinquency in interest or principal payments, and if it becomes probable that the borrower will enter bankruptcy or financial re-organization.

The carrying amount of a financial asset is reduced by the impairment loss directly for all financial assets, with the exception of accounts receivable and other receivables where the carrying amount is reduced through the use of an allowance account. When accounts receivable and other receivables are considered uncollectible, they are written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Except for uncollectible trade receivables and other receivables that are written off against the allowance account, changes in the carrying amount of the allowance account are recognized in profit or loss.

2018

The Group recognizes a loss allowance for expected credit losses on financial assets at amortized cost.

For financial instruments, the Group recognizes lifetime expected credit losses (i.e., ECLs) when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on a financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

Expected credit losses reflect the weighted average of credit losses with the respective risks of default occurring as the weights. Lifetime ECLs represent the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECLs represent the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Group recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

c) Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party.

Before 2018, on derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss which had been recognized in other comprehensive income is recognized in profit or loss. Starting from 2018, on derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in an equity instrument at FVTOCI, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss, and the cumulative gain or loss which had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

2) Equity instruments

Equity instruments issued by a group entity are classified as equity in accordance with the substance of the contractual arrangements and the definitions of an equity instrument.

Equity instruments issued by a group entity are recognized at the proceeds received, net of direct issue costs.

No gain or loss is recognized in profit or loss on the issuance of the Company's own equity instruments.

3) Financial liabilities

a) Subsequent measurement

All financial liabilities are measured at amortized cost using the effective interest method.

b) Derecognition of financial liabilities

The difference between the carrying amount of a financial liability derecognized and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

j. Revenue recognition

2017

Revenue comprises the fair value of the consideration received or receivable for the out-licensing of experimental drugs that have reached 'proof of concept' to customers for ongoing global development and launch, in the ordinary course of the Group's activities. Revenue is presented, net of goods and services tax, rebates and discounts. See Note 15 for details of the Group's licensing agreements.

The Group recognizes revenue when the Group has completed the out-licensing of the experimental drug to the customers, the customers have accepted the products and the collectability of the related receivables is reasonably assured.

Typically income from out-licensing may take the form of upfront fees, milestones and/or sales royalties. Revenue is recognized upon the receipt of the non-refundable upfront payment if the license of intellectual property has stand-alone value and the Group has no remaining, subsequent performance obligation in accordance with the licensing agreements. Otherwise, revenue recognition is deferred and spread over the period of performance on a straight-line basis. Milestone payments which are contingent on achieving certain clinical milestones are recognized as revenues either on achievement of such milestones, or over the period of the performance obligation if the Group has continuing performance obligations. Royalties on marketed drugs, which are recognized as revenue on an accrual basis and in accordance with the substance of the contracts, are recognized when it is probable that the economic benefits of a transaction will flow to the Group and the revenue can be measured reliably.

Revenue from the sale of research material is recognized when all the following conditions are satisfied:

- 1) The Group has transferred the significant risks and rewards of the research material to the buyer;
- 2) The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the research material sold;
- 3) The amount of revenue can be measured reliably;
- 4) It is probable that the economic benefits will flow to the Group; and
- 5) The costs incurred or to be incurred can be measured reliably.

Interest income is primarily a result of deposits in banks and is recognized as non-operating income when it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the applicable effective interest rate.

2018

Revenue comprises the fair value of the consideration received or receivable for the out-licensing of experimental drugs that have reached 'proof of concept' to business partners for ongoing global development and launch, in the ordinary course of our activities. Revenue is presented, net of goods and services tax, rebates and discounts. See Note 15 for details of the Group's licensing agreements.

The group recognizes revenue when it has completed the out-licensing of the experimental drug to business partners, and such partners have accepted the products, and the collectability of the related receivables is reasonably assured.

Typically the consideration received from out-licensing may take the form of upfront payments, option payments, milestone payments, and royalty payments on licensed products. To determine revenue recognition for contracts with customers, the Group performs the following five steps:

- 1) Identify the contract with a customer;
- 2) Identify the performance obligations in the contract;
- 3) Determine the transaction price;
- 4) Allocate the transaction price to the performance obligations in the contract; and
- 5) Recognize revenue when (or as) the group satisfies the performance obligations.

At the inception of a contract, the Group assesses the goods or services promised within each contract to determine whether each promised good or service is distinct and identify those that are performance obligations. The Group recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Upfront License Fees

If a license to the Group's intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Group will recognize revenues from non-refundable, upfront fees allocated to the license when the license is transferred to the licensee and the licensee is able to use and benefit from the license. Licenses that are not distinct shall be bundled with other performance obligations until it identifies a bundle of performance obligations that is distinct. The Group uses judgment to assess the nature of the combined performance obligation to determine whether it is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Group evaluates the measure of progress at the end of each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Milestone Payments

At the inception of each contract with customers that includes development or regulatory milestone payments (i.e., the variable consideration), the Group includes some or all amount of variable consideration in the transaction price estimated only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized would not occur when the uncertainty related to the variable consideration is subsequently resolved. Milestone payments that are contingent upon the achievement of events that are uncertain or not controllable, such as regulatory approvals, are generally not considered highly probable of being achieved until those approvals are received. Therefore, they are not included in the transaction price. At the end of each reporting period, the Group evaluates the probability of achievement of such milestone payments and any related constraints, and if necessary, adjusts our estimate of the overall transaction price.

Royalties

For arrangements that include sales-based royalties, including commercial milestone payments based on the level of sales, and for which the license is deemed to be the predominant item to which the royalties relate, the Group recognizes revenue at the later of the following:

- 1) when the subsequent sales occur, or
- 2) when the performance obligation, to which some or all of the royalty has been allocated, has been satisfied (or partially satisfied).

To date, the group has not recognized any royalty revenue resulting from any of out-licensing arrangements.

k. Research and development expenses

Elements of research and development expenses primarily include:

- 1) payroll and other related costs of personnel engaged in research and development activities;

- 2) costs related to preclinical testing of the Group's technologies under development and clinical trials, such as payments to contract research organizations ("CROs"), investigators and clinical trial sites that conduct the Group's clinical studies;
- 3) costs to develop the product candidates, including raw materials, supplies and product testing related expenses; and
- 4) other research and development expenses.

Research and development expenses are expensed as incurred when these expenditures relate to the Group's research and development services and have no alternative future uses. The conditions enabling the capitalization of development costs as an asset have not yet been met and, therefore, all development expenditures are recognized in profit or loss when incurred.

l. Leasing

Leases are classified as finance leases whenever the terms of a lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

The Group as lessee

Operating lease payments are recognized as expenses on a straight-line basis over the lease term.

m. Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as expenses when employees have rendered services entitling them to the contributions.

n. Share-based payment arrangements

Equity-settled share-based payments to employees are measured at the fair value of the equity instruments at the grant date.

The fair value determined at the grant date of the employee share options is expensed on a straight-line basis over the vesting period, based on the Group's estimate of the number of employee share options that will eventually vest, with a corresponding increase in "capital surplus - employee share options". The fair value determined at the grant date of the employee share options is recognized as an expense in full at the grant date when the share options granted vest immediately.

At the end of each reporting period, the Group revises its estimate of the number of employee share options expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the capital surplus.

The fair value of the amount payable to beneficiaries in respect of bonus entitlement unit grants, which are settled in cash, is recognized as an expense with a corresponding increase in liabilities, over the period during which the beneficiaries become unconditionally entitled to payment. The amount is remeasured at each reporting date and at settlement based on the fair value of the bonus entitlement units. Any changes in the liability are recognized in profit or loss.

o. Taxation

The provision for income tax recognized in profit or loss comprises current and deferred tax. Current tax is income tax paid and payable for the current year based on the taxable profit of the year and any adjustments to tax payable (or receivable) in respect of prior years. Deferred tax is accounted for using the balance sheet liability method in respect of temporary differences arising from differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax basis used in the computation of taxable profit or loss. Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilized. The carrying amount is reviewed at the end of each reporting period on the same basis. Deferred tax is measured at the tax rates that are expected to apply in the period in which the asset or liability is settled, based on tax rates that have been enacted or substantively enacted by the end of the reporting period.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, management is 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 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 estimates are revised if the revisions affect only that period or in the period of the revisions and future periods if the revisions affect both current and future periods.

a. Income tax

No deferred tax assets have been recognized on tax losses due to the unpredictability of future profit streams. The realizability of deferred tax assets mainly depends on whether sufficient future profit or taxable temporary differences will be available. In cases where the actual future profit generated is different from expected, a material adjustment of deferred tax assets may arise, which would be recognized in profit or loss for the period in which such adjustment takes place.

b. Impairment of intangible assets

Intangible assets with indefinite useful lives are tested for impairment annually and whenever an indicator of impairment exists. The Group assesses whether there is an indication of impairment based on internal and external information, including the progress of research and development project and the prospect of such technology. Determining whether an intangible asset is impaired requires an estimation of the recoverable amount and a comparison with the carrying amount. The calculation of the recoverable amount requires management to estimate the future cash flows that are expected to arise from the intangible asset and a suitable discount rate in order to calculate the present value. Any change of estimation arising from economic environment changes or the Group's strategies may lead to significant impairment loss in the future.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2017	2018
Cash on hand	\$ 2,396	\$ 2,318
Deposits in banks	50,570,815	28,906,583
	<u>\$ 50,573,211</u>	<u>\$ 28,908,901</u>

Deposits in banks consisted of highly liquid time deposits that are readily convertible to known amounts of cash and were subject to an insignificant risk or change in value.

7. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31,
	2018
<u>Non-current</u>	
Financial assets mandatorily classified as at FVTPL	
Derivative financial assets – warrants	<u>\$ 60,004</u>

In July 2018, the Group acquired warrants to subscribe for ordinary shares of DotBio Pte. Ltd., as detailed in Note 15 (under the heading of “Nanyang Technological University”).

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	December 31,
	2018
<u>Non-current</u>	
Investments in equity instruments at FVTOCI	
Foreign unlisted ordinary shares	<u>\$ 187,244</u>

In July 2018, the Group acquired ordinary shares of DotBio Pte. Ltd., as detailed in Note 15 (under the heading of “Nanyang Technological University”), which were not held for trading. The management believes that to recognize short-term fluctuations in the investments’ fair value in profit or loss would not be consistent with the Group’s purpose of holding the investments. As a result, the Group elected to designate the investments in equity instruments as at FVTOCI.

9. PROPERTY, PLANT AND EQUIPMENT

The carrying amounts of each class of property, plant and equipment were as follows:

	December 31	
	2017	2018
Office Equipment	\$ 95,866	\$ 98,820
Other Equipment	20,809	11,052
Leasehold Improvements	326,891	178,546
	<u>\$ 443,566</u>	<u>\$ 288,418</u>

For the year ended December 31, 2017

	Office Equipment	Other Equipment	Leasehold Improvements	Total
<u>Cost</u>				
Balance at January 1, 2017	\$ 148,703	\$ 26,053	\$ 328,479	\$ 503,235
Additions	62,599	9,100	219,733	291,432
Disposals	—	—	(73,708)	(73,708)
Balance at December 31, 2017	<u>\$ 211,302</u>	<u>\$ 35,153</u>	<u>\$ 474,504</u>	<u>\$ 720,959</u>
<u>Accumulated depreciation</u>				
Balance at January 1, 2017	\$ 63,515	\$ 4,949	\$ 50,382	\$ 118,846
Depreciation expenses	51,921	9,395	139,602	200,918
Disposals	—	—	(42,371)	(42,371)
Balance at December 31, 2017	<u>\$ 115,436</u>	<u>\$ 14,344</u>	<u>\$ 147,613</u>	<u>\$ 277,393</u>

For the year ended December 31, 2018

	Office Equipment	Other Equipment	Leasehold Improvements	Total
<u>Cost</u>				
Balance at January 1, 2018	\$ 211,302	\$ 35,153	\$ 474,504	\$ 720,959
Additions	65,633	1,027	13,602	80,262
Balance at December 31, 2018	<u>\$ 276,935</u>	<u>\$ 36,180</u>	<u>\$ 488,106</u>	<u>\$ 801,221</u>
<u>Accumulated depreciation</u>				
Balance at January 1, 2018	\$ 115,436	\$ 14,344	\$ 147,613	\$ 277,393
Depreciation expenses	62,679	10,784	161,947	235,410
Balance at December 31, 2018	<u>\$ 178,115</u>	<u>\$ 25,128</u>	<u>\$ 309,560</u>	<u>\$ 512,803</u>

The above items of property, plant and equipment are depreciated on a straight-line basis over their estimated useful lives as follow:

Office equipment	3 years
Other equipment	3 years
Leasehold improvements	3-5 years

10. INTANGIBLE ASSETS

The carrying amounts of each class of intangible assets were as follows:

	December 31	
	2017	2018
Licenses	\$ 73,400	\$ 23,073,400
Computer software	10,652	7,192
	<u>\$ 84,052</u>	<u>\$ 23,080,592</u>

For the year ended December 31, 2017

	<u>Licenses</u>	<u>Computer Software</u>	<u>Total</u>
<u>Cost</u>			
Balance at January 1, 2017	\$ 73,400	\$ 31,331	\$ 104,731
Additions	<u>—</u>	<u>8,844</u>	<u>8,844</u>
Balance at December 31, 2017	<u>\$ 73,400</u>	<u>\$ 40,175</u>	<u>\$ 113,575</u>
<u>Accumulated amortization</u>			
Balance at January 1, 2017	\$ —	\$ 20,465	\$ 20,465
Amortization expenses	<u>—</u>	<u>9,058</u>	<u>9,058</u>
Balance at December 31, 2017	<u>\$ —</u>	<u>\$ 29,523</u>	<u>\$ 29,523</u>

For the year ended December 31, 2018

	<u>Licenses</u>	<u>Computer Software</u>	<u>Total</u>
<u>Cost</u>			
Balance at January 1, 2018	\$ 73,400	\$ 40,175	\$ 113,575
Additions	<u>23,000,000</u>	<u>2,895</u>	<u>23,002,895</u>
Balance at December 31, 2018	<u>\$ 23,073,400</u>	<u>\$ 43,070</u>	<u>\$ 23,116,470</u>
<u>Accumulated amortization</u>			
Balance at January 1, 2018	\$ —	\$ 29,523	\$ 29,523
Amortization expenses	<u>—</u>	<u>6,355</u>	<u>6,355</u>
Balance at December 31, 2018	<u>\$ —</u>	<u>\$ 35,878</u>	<u>\$ 35,878</u>

The intangible assets, namely licenses, include the acquisitions in August 2016 of ASLAN005 from Exploit Technologies Pte. Ltd. and in January 2018 of exclusive and worldwide rights to develop, manufacture and commercialize varlitinib from Array Biopharma Inc., respectively. The information related to these license agreements is further disclosed in Note 15.

As of December 31, 2017 and 2018, the aforementioned intangible assets were not amortized since they were not yet available for use. Instead they would be tested for impairment, by comparing the recoverable amounts with the carrying amounts, annually and whenever there is an indication that they may be impaired. For the years ended December 31, 2017 and 2018, there was no impairment loss recognized.

Computer software is amortized on a straight-line basis over the estimated useful life of 3 years.

11. OTHER PAYABLES

	December 31	
	2017	2018
Payables for salaries and bonuses	\$ 1,376,197	\$ 1,153,048
Payables for professional fees	412,676	680,708
Payables for cash-settled share-based payment transactions (Note 19)	195,000	669,042
Interest payables	—	50,430
Others	96,671	129,433
	<u>\$ 2,080,544</u>	<u>\$ 2,682,661</u>

12. LONG-TERM BORROWINGS

	December 31	
	2017	2018
<u>Unsecured borrowings</u>		
Loans from government	\$ 7,411,912	\$ 7,266,315
Other long-term borrowings	—	4,060,357
Interest payables	2,267,539	2,648,122
	<u>\$ 9,679,451</u>	<u>\$ 13,974,794</u>

a. Loans from government

On April 27, 2011, the Singapore Economic Development Board (the “EDB”) awarded the Company a repayable grant (the “Grant”) not exceeding SGD 10 million (approximately \$7,482,459) to support the Company’s drug development activities over a five-year qualifying period commencing February 24, 2011 (the “Project”). The Project was successfully implemented, resulting in substantially the full amount of the Grant being disbursed to the Company.

In the event any of the Company’s clinical product candidates achieve commercial approval after Phase 3 clinical trials, the Company will be required to repay the funds disbursed to the Company under the Grant plus interest of 6%. Until the Company has fulfilled its repayment obligations under the Grant, the Company has ongoing update and reporting obligations to the EDB. In the event the Company breaches any of its ongoing obligations under the Grant, EDB can revoke the Grant and demand that the Company repay the funds disbursed to the Company under the Grant.

As of December 31, 2017 and 2018, the amounts of the funds disbursed to the Company plus accrued interest were \$9,679,451 and \$9,914,437, respectively.

b. Other long-term borrowings

On May 12, 2014, ASLAN Pharmaceuticals Pte. Ltd. obtained a loan facility of \$4.5 million from CSL Finance Pty Ltd. The amount was based on 75% of research and development costs approved by CSL Finance Pty Ltd. at each drawdown period. The loan is repayable within 10 years from the date of the facility agreement. Interest on the loan is computed at 6% plus LIBOR and is payable on a quarterly basis.

Mandatory prepayment of the loan is required upon a successful product launch occurring before maturity of the loan.

As of December 31, 2017 and 2018, the amount of funds disbursed to the Company plus accrued interest, was nil and \$4,110,787, respectively.

13. RETIREMENT BENEFIT PLANS

Defined Contribution Plans

ASLAN Pharmaceuticals Pte. Ltd. adopted a defined contribution plan, which is a post-employment benefit plan, under which ASLAN Pharmaceuticals Pte. Ltd. pays fixed contributions into the Singapore Central Provident Fund on a mandatory basis. ASLAN Pharmaceuticals Pte. Ltd. has no further payment obligations once the contributions have been paid. The contributions are recognized as “employee compensation expenses” when they are due.

ASLAN Pharmaceuticals Taiwan Limited adopted a pension plan under the Labor Pension Act (the “LPA”) of the ROC, which is a state-managed defined contribution plan. Under the LPA, ASLAN Pharmaceuticals Taiwan Limited makes monthly contributions to its Taiwan-based employees’ individual pension accounts at 6% of monthly salaries and wages.

ASLAN Pharmaceuticals (Shanghai) Co. Ltd. makes monthly contributions at a certain percentage of its Shanghai-based employees’ payroll expenses to pension accounts, which are operated by the Chinese government. Beside the aforementioned monthly contributions, the Group has no further obligation.

For the years ended December 31, 2016, 2017 and 2018, the total expense for such employee benefits in the amount of \$251,187, \$329,455 and \$424,157 were recognized, respectively.

14. EQUITY

a. Ordinary shares

	December 31		
	2016	2017	2018
Number of shares authorized	<u>200,000,000</u>	<u>200,000,000</u>	<u>500,000,000</u>
Amount of shares authorized (NT\$ thousand)	<u>\$ 2,000,000</u>	<u>\$ 2,000,000</u>	<u>\$ 5,000,000</u>
Number of shares issued and fully paid	<u>115,670,940</u>	<u>130,128,940</u>	<u>160,248,940</u>
Amount of shares issued and fully paid	<u>\$ 36,710,066</u>	<u>\$ 41,514,016</u>	<u>\$ 51,627,219</u>

The issued ordinary shares with a par value of NT\$10 entitle holders with the rights to vote and receive dividends.

On May 27, 2016, the holders of the Preference Shares approved the conversion of all the Preference Shares into an equal number, 41,614,397 of Ordinary Shares, which increased the share capital by \$41,614 (NT\$ 1,304 thousand) and the capital surplus by \$64,557,452 (NT\$ 2,053,693 thousand).

On May 27, 2016, in the shareholders’ meeting, the shareholders resolved to adjust the par value of the Company’s ordinary shares from US\$0.001 to NT\$10 and approved a share split, at a ratio of 1-to-2 after the conversion of Preference Shares into Ordinary Shares for the purpose of the proposed initial public offering and listing on TPEX. The accompanying consolidated financial statements have been retroactively adjusted to take the share split into account for the year presented.

On May 27, 2016, the Company's board of directors resolved to issue 19,667,144 ordinary shares, with a par value of NT\$10, for consideration of \$1.13 per share, which increased the share capital to \$36,710,066 (NT\$ 1,156,709 thousand).

On February 28, 2017, the Company's board of directors resolved to issue 14,458,000 ordinary shares for initial public offering on the TPEX, with a par value of NT\$10, amounting to \$4,803,950 (NT\$ 144,580 thousands), which increased the balance of the share capital to \$41,514,016 (NT\$ 1,301,289 thousands). The above issuance was declared effective by the TPEX on April 7, 2017, and the subscription base date was determined as at May 25, 2017. The abovementioned shares were issued at a weighted-average bid price of NT\$68.92 per share. The Company collected the above proceeds amounting to \$33,060,951 (NT\$ 996,495 thousands) for new shares issued on May 25, 2017.

The Company completed its initial public offering of 6,000,000 ADSs representing 30,000,000 ordinary shares on May 8, 2018 in the United States. The Company's ADSs have been listed on the Nasdaq Global Market since May 4, 2018. Each ADS represents five of the Company's ordinary shares. The offering price per ADS was \$7.03. The payment for the initial public offering was fully collected as of May 8, 2018, and the record date for this capital increase was May 8, 2018.

On September 10, 2018, the Company's board of directors resolved to increase the amount of shares authorized to NT\$5,000,000 thousand.

For long-term development purposes, on November 7, 2018, the board of directors resolved to issue ordinary shares ranging from 15,000,000 to 40,000,000 shares for the purpose of issuing the ADR, American Depositary Receipts. On December 5, 2018, the Company received the approval letter No.1070344286 from the Financial Supervisory Commission (FSC) in accordance with the regulatory requirement.

b. Capital surplus

	December 31		
	2016	2017	2018
Arising from issuance of new share capital	\$ 50,119,257	\$ 78,384,290	\$ 105,143,362
Arising from employee share options	5,136,828	5,898,391	6,316,310
	<u>\$ 55,256,085</u>	<u>\$ 84,282,681</u>	<u>\$ 111,459,672</u>

c. Retained earnings and dividends policy

Under the Company's Articles of Incorporation, the Company may declare dividends by ordinary resolution of the Company's board of directors, but no dividends shall exceed the amount recommended by the directors of the Company.

The Company may set aside out of the funds legally available for distribution, for equalizing dividends or for any other purpose to which those funds may be properly applied, either employed in the business of the Company or invested in such investments as the directors of the Company may from time to time think fit.

The accumulated deficits for 2016 and 2017 approved in the shareholders' meetings on June 28, 2017 and June 15, 2018, respectively, were as follows:

	For the Year Ended December 31	
	2016	2017
Accumulated deficits at the beginning of the year	\$ (41,342,180)	\$ (50,391,283)
Net loss for the year	(9,049,103)	(39,891,978)
Accumulated deficits at the end of the year	<u>\$ (50,391,283)</u>	<u>\$ (90,283,261)</u>

The accumulated deficits for 2018 which had been proposed by the Company's board of directors on March 22, 2019 were as follows:

	For the Year Ended December 31 2018	
Accumulated deficits at the beginning of the year		\$ (90,283,261)
Net loss for the year		(42,185,597)
Accumulated deficits at the end of the year		<u>\$ (132,468,858)</u>

The accumulated deficits for 2018 are subject to the resolution of the shareholders' meeting to be held on June 21, 2019.

15. LICENSE AGREEMENTS

Array Biopharma

The Company entered into a license agreement in 2011 with Array Biopharma Inc. ("Array") to develop Array's pan-HER inhibitor, ARRY-543 (which the Company refers to as ASLAN001 or varlitinib), for the treatment or prevention of any disease or condition in humans, without upfront payments. Under the license agreement, the Company agreed to fund and globally develop ASLAN001 through proof of concept, initially targeting patients with gastric cancer through a development program conducted in Asia.

Upon achievement of proof of concept, the Company agreed to collaborate or out-license to third parties for the further phase 3 development and commercialization. Under the license agreement, the Company agreed to pay Array 50% of the proceeds from out-licensing as royalties.

On January 3, 2018, the Company entered into a new license agreement with Array pursuant to which the Company obtained an exclusive, worldwide license to develop, manufacture and commercialize varlitinib for all human and animal therapeutic, diagnostic and prophylactic uses. This new license agreement replaces and supersedes the previous collaboration and license agreement with Array dated July 12, 2011.

Under the new license agreement, the Company agreed to use commercially reasonable efforts to obtain approval by the U.S. FDA or the applicable health regulatory authority and commercialize varlitinib.

In consideration of the rights granted under the agreement, the Company made an initial upfront payment to Array of \$12,000,000 in January 2018 and an additional payment \$11,000,000 in June 2018, respectively, that were capitalized as a separately acquired intangible asset. In addition, the Company will be required to pay up to \$30,000,000 if certain development milestones are achieved, \$20,000,000 if certain regulatory milestones are achieved, and up to \$55,000,000 if certain commercial milestones are achieved. The Company is also required to pay Array tiered royalties in the low tens on net sales of varlitinib. The royalty obligations will continue on a country-by-country basis through the later of the expiration of the last valid patent claim for varlitinib or ten years after the first commercial sale of varlitinib in a given country. As of December 31, 2018, the Company did not accrue for the above contingent payments since the milestones are not achieved.

If within two years of the date of the new license agreement the Company sublicenses varlitinib and is paid an upfront payment, Array will be further entitled to receive one-half of the portion of any such upfront payment that exceeds a specified amount. In the event that the base royalty under a sublicense agreement is 20% or less, the Company will only be required to share with Array one-half of the amount actually received by the Company under such sublicense agreement in lieu of the tiered royalties described above, provided that the royalty paid in such case shall in no event be less than a royalty in the high single digit range.

If the Company undergoes a change in control during a defined period following execution of the new license agreement, Array will also be entitled to receive a low to mid single-digit percentage of the proceeds resulting from the change in control. Unless earlier terminated, the agreement will continue on a country-by-country basis until the expiration of the respective royalty obligations in such country. Upon such expiration in such country, Array will grant to the Company a perpetual, royalty-free, non-terminable, non-revocable, non-exclusive license to exploit certain know-how in connection with the development, manufacturing and/or commercialization of varlitinib for all human and animal therapeutic, diagnostic and prophylactic uses in such country. Either party may terminate the agreement (i) in the event of the other party's material breach of the agreement that remains uncured for a specified period of time or (ii) the insolvency of the other party. In addition, if there is a change in control, the Company may also terminate the agreement without cause at any time upon 180 days advance notice to Array.

Bristol-Myers Squibb

The Company entered into a license agreement with Bristol-Myers Squibb in 2011, to receive exclusive rights to develop and commercialize BMS-777607 (which the Company refers to as ASLAN002) in China, Australia, Korea, Taiwan and other selected Asian countries, without upfront payments. Bristol-Myers Squibb retains the exclusive rights in the rest of the world. Under the license agreement, the Company would fund and develop ASLAN002 through proof of concept under a development plan that would initially target gastric cancer and lung cancer.

After the Company completed the phase 1 clinical trial, Bristol-Myers Squibb licensed the exclusive rights from the Company to further the development and commercialization of ASLAN002 worldwide. Under the terms of the license agreement, the Company has received an upfront payment of \$10,000,000 in 2016. The Company is eligible to receive additional payments upon Bristol-Myers Squibb's achievement of development and regulatory milestones in the future. Furthermore, the Company is eligible to receive royalty payments on future worldwide sales generated by Bristol-Myers Squibb. Bristol-Myers Squibb also purchased the related research materials, supplies, research documentation and clinical trial results that are used for further developing ASLAN002 from the Company in the amount of \$1,294,034 which was delivered in 2016. Such amount was recorded in the accounts receivable as of December 31, 2016 and was collected during the first quarter of 2017. As Bristol-Myers Squibb assumes the responsibility for all development and commercialization activities and expenses, and the Company currently has no further obligations under the license agreement. Accordingly, the Company recognized the upfront payment from out-licensing and other payment from the sale of research materials, supplies, research documentation and clinical trial results, totaling \$11,294,034, in revenue for the year ended December 31, 2016.

Almirall

In 2012, the Company originally entered into a global licensing agreement with Almirall to develop DHODH inhibitor, LAS186323, which the Company refers to as ASLAN003, for rheumatoid arthritis (excluding any topical formulation), without upfront payments. Under the license agreement, the Company agreed to fund and develop ASLAN003 to the end of Phase 2 through a development program conducted in the Asia-Pacific region.

The original license agreement was replaced by a new agreement, executed in December 2015 and amended in March 2018, granting an exclusive, worldwide license to develop, manufacture and commercialize ASLAN003 products for all human diseases with primary focus on oncology diseases, excluding topically-administered products embodying the compound for keratinocyte hyperproliferative disorders, and the non-melanoma skin cancers basal cell carcinoma, squamous cell carcinomas and Gorlin Syndrome. Under the license agreement, Almirall is eligible to receive milestone payments and royalties based on the sales generated by the Company and/or sublicensees.

CSL

The Company entered into a global license agreement with CSL Limited (“CSL”), in May 2014, to develop the anti-IL13 receptor monoclonal antibody, CSL334 (which the Company refers to as ASLAN004) and antigen binding fragments thereof, for the treatment, diagnosis or prevention of diseases or conditions in humans, without upfront payments. This license agreement was amended in September 2018. Under the license agreement (as amended), the Company will be responsible to develop ASLAN004 through to clinical proof of concept in a development program, targeting patients suffering moderate to severe atopic dermatitis. Upon achievement of clinical proof of concept (or earlier, if agreed), the Company will collaborate or out-license to third parties for further Phase 3 development and commercialization. Under the global license agreement, the Company will pay to CSL a share in the range of 40 to 50 percent of all licensing revenue it receives from future out-licensing agreements.

Hyundai Pharm Co., Ltd.

In October 2015, the Company entered into a license agreement with Hyundai Pharm Co., Ltd. (“Hyundai”). Under the terms of the license agreement, the Company granted Hyundai options to acquire the rights to use its intellectual property to develop and commercialize varlitinib for the treatment of cholangiocarcinoma (i.e., CCA) in South Korea, and the Company has received an option payment of \$250,000 from Hyundai in 2016. As there was no performance obligation required for the Company, the payment was recognized as revenue, and the related cost of revenue in the amount of \$125,000 paid to one of the third parties with whom the Company has a licensing agreement as part of the payment for the proceeds from out-licensing was recognized as cost of revenue, for the year ended December 31, 2016. The Company was eligible for additional regulatory and commercial milestones payments as well as royalties on product sales.

In February 2019, the Company made a payment of \$325,000 to Hyundai in order to buy back the rights to commercialize varlitinib in CCA.

Exploit Technologies Pte Ltd. (“ETPL”)/P53 Laboratory

The Company entered into a licensing agreement with ETPL, in August 2016, to license Intellectual Property (IP) arising from a research collaboration with ETPL’s P53 Laboratory. The IP focuses on generation of novel immuno-oncology antibodies targeting recepteur d’origine nantais (“RON”) and such antibodies are referred to by the Company collectively as ASLAN005. The license fee of SG\$100,000 (or \$73,400) is capitalized as a separately acquired intangible

asset. Under the license agreement, the Company has the exclusive rights to develop and commercialize ASLAN005 worldwide. ETPL is eligible to receive up to an aggregate of SG\$12,000,000 (or \$8,978,951) in milestone payments if certain development and commercial milestones are achieved, as well as royalties calculated based on any sales generated by the Company.

In August 2016, the Company and ETPL's P53 Laboratory entered into a three-year research collaboration agreement. Under the terms of the agreement, the Company will be responsible for the design of innovative clinical development programs, in collaboration with P53 Laboratory, which will continue to be responsible for the preclinical development of the antibody assets.

Nanyang Technological University

The Company entered into a licensing and research collaboration agreement with Nanyang Technological University (NTU) in October 2016, for the development of modybodies against three targets of the Company's choice. The agreement expired in April 2018, but the Company retained continuing rights: a half share ownership in the resulting IP, together with an exclusive option to obtain global rights to develop and commercialize the modybodies, with such option exercisable until October 2018. In July 2018, the technology for modybodies was separated from NTU and licensed to a new company, DotBio Pte. Ltd. In exchange for the Company's giving up its residual rights and options in respect to the technology, the Company received 599,445 shares of DotBio Pte. Ltd. equivalent to SG\$255,000 (\$187,244) (see Note 8), together with 599,445 units of warrant to subscribe for the same number of shares at a subscription price of \$0.32 which was the same value per share as applied to other new investors in this round (see Note 7); in addition, the Company also retained a right of first refusal to take an exclusive license for any modybodies produced by DotBio Pte. Ltd. that are based on the work generated from the collaborative agreement between NTU and the Company. However, as the right of first refusal did not limit DotBio Pte. Ltd.'s ability to direct the use of the asset, or to obtain substantially all the remaining benefits from the asset, this would not prevent DotBio Pte. Ltd. from obtaining control of the asset. Accordingly, the Company recognized the non-cash gain arising from the derecognition and recorded it as other income of \$187,244 for the year ended December 31, 2018, because it was not a good or service that was an output of the Company's ordinary activities.

BioGenetics Co. Ltd.

In February 2019, the Company entered into a licensing agreement with BioGenetics to grant exclusive rights to commercialise varlitinib in South Korea in exchange for an upfront payment of \$2,000,000 and up to \$11,000,000 in sales and development milestone payments. The Company is also eligible to receive tiered double digit royalties on net sales up to the mid-twenties. The Company has no other performance obligation in addition to the license, and BioGenetics will be responsible for obtaining initial and all subsequent regulatory approvals of varlitinib in South Korea.

In March 2019, the Company entered into another licensing agreement with BioGenetics to grant exclusive rights to commercialise ASLAN003 in South Korea in exchange for an upfront payment of \$1,000,000 and up to \$8,000,000 in sales and development milestone payments. The Company is also eligible to receive tiered double digit royalties on net sales from the high-teens to the mid-twenties range. The Company has no other performance obligation in addition to the license, and BioGenetics will be responsible for obtaining initial and all subsequent regulatory approvals of ASLAN003 in South Korea.

16. LOSS BEFORE INCOME TAX

a. Other gains and losses

	For the Year Ended December 31		
	2016	2017	2018
Net foreign exchange gains (losses)	\$ 165,807	\$ (667,130)	\$ 95,894
Fair value changes of financial assets mandatorily classified as at FVTPL	—	—	60,004
Loss on disposal of property, plant and equipment	(12,316)	(31,298)	—
Others	(26,019)	(263)	57,345
	<u>\$ 127,472</u>	<u>\$ (698,691)</u>	<u>\$ 213,243</u>

b. Finance costs

	For the Year Ended December 31		
	2016	2017	2018
Interest on government loans	\$ 417,812	\$ 416,698	\$ 441,474
Preference share dividends	87,889	—	—
Interest on CSL loan	18,437	—	—
Other interest expenses	—	—	50,430
	<u>\$ 524,138</u>	<u>\$ 416,698</u>	<u>\$ 491,904</u>

c. Depreciation and amortization

	For the Year Ended December 31		
	2016	2017	2018
Property, plant and equipment	\$ 65,874	\$ 200,918	\$ 235,410
Computer software	10,010	9,058	6,355
	<u>\$ 75,884</u>	<u>\$ 209,976</u>	<u>\$ 241,765</u>

All depreciation and amortization expenses were recognized as general and administrative expenses for the years ended December 31, 2016, 2017 and 2018.

d. Employee benefits expense

	For the Year Ended December 31		
	2016	2017	2018
Short-term benefits	\$ 5,212,357	\$ 7,062,311	\$ 8,002,069
Post-employment benefits	251,187	329,455	424,157
Share-based payments (Note 19)			
Equity-settled	1,419,923	769,595	451,060
Cash-settled	—	357,000	838,677
Total employee benefits expense	<u>\$ 6,883,467</u>	<u>\$ 8,518,361</u>	<u>\$ 9,715,963</u>
An analysis of employee benefits expense by function			
General and administrative expenses	\$ 4,224,919	\$ 4,664,285	\$ 6,294,470
Research and development expenses	2,658,548	3,854,076	3,421,493
	<u>\$ 6,883,467</u>	<u>\$ 8,518,361</u>	<u>\$ 9,715,963</u>

e. Employees' compensation and remuneration of directors

Under the Company's Articles of Incorporation, the Company shall accrue employees' compensation and remuneration of directors at the rates of no less than 0.1% and no higher than 1%, respectively, of profit before income tax, net of employees' compensation and remuneration of directors.

The Company had accumulated deficits for the years ended December 31, 2016, 2017 and 2018; therefore, no compensation for employees and remuneration of directors was accrued.

17. INCOME TAXES

Income tax recognized in profit or loss	For the Year Ended December 31		
	2016	2017	2018
Current tax			
Adjustments for prior periods	\$ —	\$ —	\$ 14,439

A reconciliation of accounting profit and income tax expense was as follows:

	For the Year Ended December 31		
	2016	2017	2018
Loss before income tax	\$ (9,049,103)	\$ (39,891,978)	\$ (42,171,158)
Income tax benefit calculated at the statutory rate	\$ (1,538,347)	\$ (6,781,636)	\$ (7,169,097)
Nondeductible expenses in determining taxable income	473,085	4,288,090	112,263
Tax credits for research and development expenditures	(990,065)	(2,224,348)	(2,312,251)
Unrecognized loss carryforward	2,011,373	4,519,942	9,261,996
Effect of different tax rates of group entities operating in other jurisdictions	43,954	197,952	107,089
Adjustments for prior years' tax	—	—	14,439
Income tax expense recognized in profit or loss	\$ —	\$ —	\$ 14,439

a. Cayman Islands

The Company is incorporated in the Cayman Islands. Under the current laws of the Cayman Islands, the Company is not subject to tax on income or capital gains. Additionally, the Cayman Islands does not impose a withholding tax on payments of dividends to shareholders.

b. Singapore

ASLAN Pharmaceuticals Pte. Ltd. is subject to the statutory corporate income tax rate of 17%. As of December 31, 2018, the Company has unrecognized loss carryforward of \$146,316,690. Deferred tax assets are not recognized for loss carryforward since the future taxable profits available to offset against those loss carryforward are uncertain.

c. Taiwan

ASLAN Pharmaceuticals Taiwan Limited, incorporated in Taiwan, is subject to the statutory corporate income tax rate of 17% for the year ended December 31, 2016 and 2017. The Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%, effective in 2018. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings is reduced from 10% to 5%.

The income tax returns have been assessed by the tax authorities through 2017.

d. Australia

ASLAN Pharmaceuticals Australia Pty Ltd., incorporated in Australia, is subject to the statutory corporate income tax of 30%. ASLAN Pharmaceuticals Australia Pty Ltd. has no taxable income for the years ended December 31, 2017 and 2018, and therefore, no provision for income tax is required.

e. Hong Kong

ASLAN Pharmaceuticals Hong Kong Limited, incorporated in Hong Kong, is subject to the statutory corporate income tax of 16.5%. Under the Hong Kong tax law, ASLAN Pharmaceuticals Hong Kong Limited is exempted from income tax on its foreign derived income and there are no withholding taxes in Hong Kong on the remittance of dividends. ASLAN Pharmaceuticals Hong Kong Limited has no taxable income for the years ended December 31, 2016, 2017 and 2018, and therefore, no provision for income tax is required.

f. China

ASLAN Pharmaceuticals (Shanghai) Co. Ltd., incorporated in China, is subject to the statutory corporate income tax rate of 25%. ASLAN Pharmaceuticals (Shanghai) Co. Ltd. has no taxable income for the years ended December 31, 2016, 2017 and 2018, and therefore, no provision for income tax is required.

g. United States of America

ASLAN Pharmaceuticals (USA) Inc., incorporated in Delaware, U.S.A. in October 2018, is subject to the statutory federal income tax rate of 21% and state income tax rate of 8.7%. ASLAN Pharmaceuticals (USA) Inc. has no taxable income for the year ended December 31, 2018, and therefore, no provision for income tax is required.

18. LOSS PER SHARE

	For the Year Ended December 31		
	2016	2017	2018
Basic and diluted loss per share	<u>\$ (0.09)</u>	<u>\$ (0.32)</u>	<u>\$ (0.28)</u>

The loss and weighted-average number of ordinary shares outstanding used in the computation of loss per share are as follows:

	For the Year Ended December 31		
	2016	2017	2018
Loss used in the computation of basic and diluted loss per share	\$ (9,049,103)	\$ (39,891,978)	\$ (42,185,597)
Weighted-average number of ordinary shares in the computation of basic loss per share	105,027,040	124,424,960	149,739,242

If the outstanding employee share options issued by the Company are converted to ordinary shares, they are anti-dilutive and excluded from the computation of diluted earnings per share. For the year ended December 31, 2016, 34,678,664 weighted-average number of outstanding convertible preference shares and 12,884,672 weighted-average number of employee share options were excluded from the computation of diluted earnings/loss per share because their impact was anti-dilutive. Potential ordinary shares arising from the aforementioned anti-dilutive outstanding employee share options are 7,224,123 and 6,664,244 shares for the years end 2017 and 2018, respectively.

19. SHARE-BASED PAYMENT ARRANGEMENTS

New Shares Reserved for Subscription by Employees under Cash Injection

On February 28, 2017, the Company's board of directors approved the issuance of 14,458,000 ordinary shares for initial public offering on the TPEX and simultaneously reserved 1,446,000 ordinary shares for subscription by employees according to the Company Act of the ROC, and employees were granted the share options to subscribe for all of the reserved ordinary shares on May 16, 2017.

The Group used the binomial option price model to determine the fair value of the share options granted to employees on May 16, 2017, and the related assumptions and the fair value of the options are as follows:

	Share Options Granted on May 16, 2017
Grant-date share price (NT\$)	\$ 68.92
Exercise price (NT\$)	\$ 68.92
Expected volatility	37.33%
Expected life	0.02 year
Dividends yield	—
Risk-free interest rate	0.08%
Weighted-average fair value of options (NT\$)	\$ 1.44

Expected volatility was based on the average annualized historical share price volatility of the Company's comparable companies before the grant date.

The aforementioned options granted to employees are accounted for and measured at fair value in accordance with IFRS 2. The recognized compensation costs were \$8,032 for the year ended December 31, 2017 and were classified as "capital surplus – ordinary shares" after collecting the proceeds for employee share subscriptions.

Employee Share Option Plan

Under the Company's employee share option plan, qualified employees of the Company and its subsidiaries were granted 661,000 options in July 2010, 910,000 options in July 2011, 669,750 options in July 2012, 619,250 options in July 2013, 680,625 options in July 2014, 2,477,336 options in July 2015, 1,032,250 options in July 2016 and 825,833 options in September 2017. Each option entitles the holder to subscribe for one ordinary share of the Company. The options granted are valid for 10 years and exercisable at certain percentages once they have vested. No performance conditions were attached to the plan. The Company has no legal constructive obligation to repurchase or settle the options in cash.

The board of directors of the Company, as of July 26, 2016, resolved to double the number of shares underlying each outstanding award granted previously to reflect the subdivision ratio of the share split made in connection with the corporate restructuring of May 27, 2016. The exercise price for each award previously granted was correspondingly adjusted by a decrease of 50%. The modification did not cause any incremental adjustments to the fair value of the granted awards.

As of December 31, 2018, there are 14,343,213 ordinary shares issuable on the exercise of share options outstanding under the Company's equity incentive plans.

Information on employee share options granted from July 2010 to July 2016 is as follows:

	For the Year Ended December 31					
	2016		2017		2018	
	Number of Options	Weighted- average Exercise Price	Number of Options	Weighted- average Exercise Price	Number of Options	Weighted- average Exercise Price
Balance at January 1	5,946,461	\$ 1.27	6,958,461	\$ 1.42	6,887,523	\$ 1.41
Options granted	1,032,250	2.26	—	—	—	—
Options forfeited	(20,250)	1.36	(70,938)	1.95	(5,000)	2.13
Options exercised	—	—	—	—	(60,000)	0.80
Balance at December 31	<u>6,958,461</u>	1.42	<u>6,887,523</u>	1.41	<u>6,822,523</u>	1.41
Options exercisable, end of period	<u>4,830,503</u>	1.20	<u>5,825,816</u>	1.30	<u>6,595,294</u>	1.38
Weighted-average fair value of options granted	<u>\$ 0.89</u>		<u>\$ 0.89</u>		<u>\$ 0.89</u>	

Information on employee share options granted in September 2017 is as follows:

	For the Year Ended December 31			
	2017		2018	
	Number of Options	Weighted- average Exercise Price	Number of Options	Weighted- average Exercise Price
Balance at January 1	—	\$ —	755,833	\$ 1.28
Options granted	825,833	1.28	—	—
Options forfeited	(70,000)	1.28	(57,666)	1.28
Balance at December 31	<u>755,833</u>	<u>1.28</u>	<u>698,167</u>	<u>1.28</u>
Options exercisable, end of period	—	—	—	—
Weighted-average fair value of options granted	<u>\$ 0.62</u>		<u>\$ 0.62</u>	

Information on outstanding options as of December 31, 2018 is as follows:

July 2010		July 2011		July 2012		July 2013		July 2014		July 2015		July 2016		September 2017	
Range of Exercise Price	Weighted-average Remaining Contractual Life (Years)	Range of Exercise Price	Weighted-average Remaining Contractual Life (Years)	Range of Exercise Price	Weighted-average Remaining Contractual Life (Years)	Range of Exercise Price	Weighted-average Remaining Contractual Life (Years)	Range of Exercise Price	Weighted-average Remaining Contractual Life (Years)	Range of Exercise Price	Weighted-average Remaining Contractual Life (Years)	Range of Exercise Price	Weighted-average Remaining Contractual Life (Years)	Range of Exercise Price	Weighted-average Remaining Contractual Life (Years)
\$0.20-\$0.80	1.5	\$0.20-\$0.80	2.5	\$0.80	3.5	\$0.80-\$1.36	4.5	\$1.36	5.5	\$1.36-\$1.88	6.5	\$2.26	7.5	\$1.28	8.7

Options granted in July of 2010, 2011, 2012, 2013, 2014, 2015, 2016 and September 2017 were priced using the binomial option pricing model, and the inputs to the model were as follows:

	July 2010	July 2011	July 2012	July 2013	July 2014	July 2015	July 2016	September 2017
Grant-date share price	\$ 0.80	\$ 0.80	\$ 1.25	\$ 1.36	\$ 1.36	\$ 1.88	\$ 2.26	\$ 1.28
Exercise price	\$0.20-\$0.80	\$0.20-\$0.80	\$ 0.80	\$0.80-\$1.36	\$ 1.36	\$1.36-\$1.88	\$ 2.26	\$ 1.28
Expected volatility	59.16%	54.26%-54.44%	52.25%	50.58%	50.86%	36.37%	39.34%	38.33%
Expected life (years)	10	10	10	10	10	10	10	10
Expected dividend yield	—	—	—	—	—	—	—	—
Risk-free interest rate	2.954%	2.96%-3.22%	1.61%	2.5%	2.58%	2.43%	1.46%	1.1027%

Expected volatility was based on the average annualized historical share price volatility of comparable companies before the grant date.

Compensation costs recognized for the years ended December 31, 2016, 2017 and 2018 were \$1,419,923, \$769,595 and \$451,060, respectively.

Long Term Incentive Plan

On August 23, 2017 and July 30, 2018, the Company's board of directors approved the 2017 and 2018 Senior Management Team (SMT) Long Term Incentive Plans (the "2017 LTIP" and "2018 LTIP"), respectively, which outlines awards that may be granted to qualified employees of the Company. These plans are applicable to the SMT of the Company and are used for long-term retention of key management. The LTIPs are each valid for ten years, and grantees of the bonus entitlement units can exercise their rights once they have vested. The Company shall pay the intrinsic value of the units awarded to the employees at the date of exercise of their awards, if redeemed by an employee.

As of December 31, 2018, there are 1,566,000 bonus entitlement units which have been granted under the 2017 LTIP by the Company. For the 1,462,000 units under the 2017 LTIP which were granted in 2017, they will vest in thirds each year after the first, second, and third anniversary of the award, and for the 104,000 units under the 2017 LTIP which were granted in 2018, they will vest in halves each year after the second and third anniversary of the award.

The value of the 2017 LTIP is measured based on the quoted share price. On July 30, 2018 the board of directors approved the modification of the 2017 LTIP which retrospectively changes the share price Taiwan share price to ADS price at a 5:1 conversion ratio. The LTIP are consider cash-settled awards and are measured at fair value. The change in fair value from the modification was insignificant and was recognized immediately in profit or loss.

The Company's 2017 LTIP is described as follows:

	For the Year Ended December 31	
	2017	2018
Balance at January 1	—	1,462,000
Awards granted	1,462,000	104,000
Awards exercised	—	(86,666)
Balance at December 31	1,462,000	1,479,334
Balance exercisable, end of period	—	400,667

As of December 31, 2018, there are 241,142 bonus entitlement units which have been granted under the 2018 LTIP by the Company. For the 241,142 units under the 2018 LTIP, they will vest in thirds each year after the first, second, and third anniversary of the award. The value of the 2018 LTIP will be linked to the ADS price. All of the 2018 LTIP granted bonus entitlement units remained outstanding as of December 31, 2018.

The Company's 2018 LTIP is described as follows:

	For the Year Ended December 31, 2018
Balance at January 1	—
Awards granted	241,142
Balance at December 31	241,142
Balance exercisable, end of period	—

Each bonus entitlement unit grants the holders of the 2017 LTIP and the 2018 LTIP a conditional right to receive an amount of cash equal to the per-unit fair market value of the Company's ordinary shares and ADSs, respectively, on the settlement date. The LTIPs qualify as cash-settled share-based payment transactions. The Company recognizes the liabilities in respect of its obligations under the LTIPs, which are measured based on the Company's quoted market price of its ADSs at the reporting date, and takes into account the extent to which the services have been rendered to date.

Regarding the Company's 2017 and 2018 LTIPs, the respective quoted fair value of the awards on the grant date was NT\$33.45 (or \$1.10) and \$7.90, based on the Taiwan share price on August 23, 2017 and the closing price per ADS on July 30, 2018, respectively. The quoted fair value on the reporting date is based on the closing price of Taiwan share price of NT\$33.20 (or \$1.12) as of December 31, 2017 and the closing price per ADS of \$3.60 as of December 31, 2018, respectively.

The Company recognized total expenses of \$357,000 and \$838,677 in respect of the LTIPs for the years ended December 31, 2017 and 2018, respectively. As of December 31, 2017 and 2018, the Company recognized compensation liabilities of \$195,000 and \$669,042 as current (classified as other payables) , respectively, and \$162,000 and \$289,613 as non-current, respectively.

20. OPERATING LEASE ARRANGEMENTS

The Group as lessee

Operating leases relate to leases of office, parking space and copiers with lease terms between 1 and 5 years. The Group does not have a bargain purchase option to acquire the leased office, parking space and copiers at the expiration of the lease periods.

The future minimum lease payments of non-cancellable operating lease commitments were as follows:

	December 31		
	2016	2017	2018
No later than 1 year	\$ 309,220	\$ 555,133	\$ 493,534
Between 1 and 5 years	485,053	632,340	105,859
	<u>\$ 794,273</u>	<u>\$ 1,187,473</u>	<u>\$ 599,393</u>

21. CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to safeguard cash as well as maintain financial liquidity and flexibility to support the development of its product candidates and programs as a going concern through the optimization of the debt and equity balance.

The Group's financial strategy is designed to maintain a flexible capital structure consistent with the objectives stated above and to respond to business growth opportunities and changes in economic conditions. The capital structure of the Group mainly consists of borrowings and equity of the Group. Key management personnel of the Group review the capital structure periodically. In order to maintain or balance the overall capital structure, the Group may adjust the amounts of long-term borrowings, or the issuance of new shares capital or other equity instruments.

As of December 31, 2018, there were no changes in the Group's capital management policy, and the Group is not subject to any externally imposed capital requirements.

22. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments not measured at fair value

The Group believes that the carrying amounts of financial assets and financial liabilities not measured at fair value approximate their fair values.

b. Fair value of financial instruments measured at fair value on a recurring basis

1) Fair value hierarchy

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Derivative financial assets	\$ —	\$ —	\$ 60,004	\$ 60,004
Financial assets at FVTOCI				
Investments in equity instruments at FVTOCI of unlisted companies.	<u>\$ —</u>	<u>\$ 187,244</u>	<u>\$ —</u>	<u>\$ 187,244</u>

There were no transfers between Levels 1 and 2 in the current and prior periods.

2) Valuation techniques and inputs applied for Level 2 fair value measurement

The fair values of unlisted equity investments are measured on the basis of the prices of recent investment by third parties with the consideration of other factors that market participants would take into account.

3) Valuation techniques and inputs applied for Level 3 fair value measurement

The fair values of warrants are determined using option pricing models where the significant unobservable input is historical volatility. An increase in the historical volatility used in isolation would result in an increase in the fair value. As of December 31, 2018, the historical volatility used was 42.33%.

c. Categories of financial instruments

	2016	December 31	
		2017	2018
Financial assets			
Financial assets at FVTPL			
Mandatorily classified as at FVTPL	\$ —	\$ —	\$ 60,004
Loans and receivables (1)	53,155,861	50,734,158	—
Financial assets at amortized cost (2)	—	—	29,080,981
Financial assets at FVTOCI			
Equity instruments	—	—	187,244
Financial liabilities			
Financial liabilities at amortized cost (3)	12,139,230	15,463,286	21,304,150

- 1) The balances include loans and receivables measured at amortized cost, which comprise cash and cash equivalents and refundable deposits.
- 2) The balances included financial assets at amortized cost, which comprise cash and cash equivalents and refundable deposits.
- 3) The balances include financial liabilities at amortized cost, which comprise trade payables, partial other payables and long-term borrowings.

c. Financial risk management objectives and policies

The Group's financial risk management objective is to monitor and manage the financial risks relating to the operations of the Group. These risks include market risk (including foreign currency risk and interest rate risk), credit risk and liquidity risk. In order to minimize the effect of financial risks, the Group devoted time and resources to identify and evaluate the uncertainty of the market to mitigate risk exposures.

1) Market risk

The Group's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates (see (a) below) and interest rates (see (b) below).

a) Foreign currency risk

The Group had foreign currency transactions, which exposed the Group to foreign currency risk.

The Group's significant financial assets and liabilities denominated in foreign currencies were as follows:

December 31, 2016			
	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
SGD	\$ 1,627,096	0.6916	\$ 1,125,364
Financial liabilities			
Monetary items			
SGD	12,051,989	0.6916	8,335,631
December 31, 2017			
	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
SGD	\$ 1,778,293	0.7482	\$ 1,330,600
Financial liabilities			
Monetary items			
SGD	12,936,189	0.7482	9,679,451
December 31, 2018			
	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
SGD	\$ 2,297,231	0.7335	\$ 1,685,019
Financial liabilities			
Monetary items			
SGD	13,515,737	0.7335	9,914,437

Sensitivity analysis

The Group is mainly exposed to the Singapore dollar.

The following table details the Group's sensitivity to a 5% increase and decrease in the US dollar against the relevant foreign currency. The rate of 5% is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items. A positive number below indicates a decrease in pre-tax loss where the US dollar strengthens 5% against the relevant currency. For a 5% weakening of the US dollar against the relevant currency, there would be an equal and opposite impact on pre-tax loss, and the balances below would be negative.

For the Year Ended December 31			
	2016	2017	2018
Profit or loss			
SGD*	\$ (360,513)	\$ (417,443)	\$ (411,471)

* This is mainly attributable to the exposure to outstanding deposits in banks and loans in foreign currency at the end of the reporting period.

b) Interest rate risk

The Group is exposed to interest rate risk because entities in the Group borrowed funds at both fixed and floating interest rates. The risk is managed by the Group by maintaining an appropriate mix of fixed and floating rate borrowings.

The sensitivity analysis below is determined based on the Group's exposure to interest rates for fixed rate borrowings at the end of the reporting period, and is prepared assuming that the amounts of liabilities outstanding at the end of the reporting period are outstanding for the whole year. A 100-basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 100 basis points higher/lower and all other variables were held constant, the Group's pre-tax loss for the years ended December 31, 2016, 2017 and 2018 would have decreased/increased by \$83,356, \$96,795 and \$99,144, respectively.

2) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in a financial loss to the Group. The Group adopted a policy of only dealing with creditworthy counterparties and financial institutions, where appropriate, as a means of mitigating the risk of financial loss from defaults.

3) Liquidity risk

The Group manages liquidity risk by monitoring and maintaining a level of cash and cash equivalents that are deemed adequate to finance the Group's operations and mitigate the effects of fluctuations in cash flows. In addition, management monitors the utilization of long-term borrowings and ensures compliance with loan covenants. The Group evaluates that, based upon the current operating plan, the existing capital resources will be sufficient to fund the anticipated operations for at least the next 12 months.

23. TRANSACTIONS WITH RELATED PARTIES

Balances and transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed in this note. Details of transactions between the Group and other related parties are disclosed below.

Compensation of Key Management Personnel

	For the Year Ended December 31		
	2016	2017	2018
Short-term employee benefits	\$ 2,276,467	\$ 3,203,745	\$ 2,833,520
Post-employment benefits	75,989	125,237	140,474
Share-based payments	1,078,054	801,701	791,310
	<u>\$ 3,430,510</u>	<u>\$ 4,130,683</u>	<u>\$ 3,765,304</u>

The remuneration of directors and key executives was determined by the remuneration committee based on the performance of individuals and market trends.

24. SEGMENT INFORMATION

The Group's chief operating decision maker, the Chief Executive Officer, reviews the Group's consolidated results when making decisions about the allocation of resources and when assessing performance of the Group as a whole, and hence, the Group has only one reportable segment. The Group does not distinguish between markets or segments for the purpose of internal reporting. The basis of information reported to the chief operating decision maker is the same as the Group's consolidated financial statements. As the Group's long-lived assets are substantially located in and derived from Asia, no geographical segments are presented.

The following is an analysis of the Group's revenue from its major products and services.

	For the Year Ended December 31		
	2016	2017	2018
Out-licensing	\$ 10,250,000	\$ —	\$ —
Others	1,296,971		
	<u>\$ 11,546,971</u>	<u>\$ —</u>	<u>\$ —</u>

Out-licensing is the revenue generated from out-licensing to Hyundai in the amount of \$250,000 and to Bristol-Myers Squibb in the amount of \$10,000,000. Others refers to the revenue generated from the sale of research materials, supplies, research documentation and clinical trial results to Bristol-Myers Squibb. See Note 15 for details.

THE COMPANIES LAW (AS AMENDED)
COMPANY LIMITED BY SHARES
SIXTH AMENDED AND RESTATED
MEMORANDUM AND ARTICLES OF ASSOCIATION
OF
ASLAN PHARMACEUTICALS LIMITED

(Adopted by Special Resolution passed on 30 October 2018)

THE COMPANIES LAW (AS AMENDED)
COMPANY LIMITED BY SHARES
SIXTH AMENDED AND RESTATED
MEMORANDUM OF ASSOCIATION
OF
ASLAN PHARMACEUTICALS LIMITED

(Adopted by Special Resolution passed on 30 October 2018)

1. The name of the Company is ASLAN PHARMACEUTICALS LIMITED (the “**Company**”).
 2. The registered office of the Company is situated at the offices of **Intertrust Corporate Services (Cayman) Limited, 190 Elgin Avenue, George Town, Grand Cayman KY1-9005, Cayman Islands** or at such other location as the Directors may from time to time determine.
 3. The objects for which the Company is established are unrestricted and the Company shall have full power and authority to carry out any object not prohibited by any law as provided by Section 7(4) of the Companies Law of the Cayman Islands (as amended) (the “**Law**”).
 4. The Company shall have and be capable of exercising all the functions of a natural person of full capacity irrespective of any question of corporate benefit as provided by Section 27(2) of the Law.
 5. The Company will not trade in the Cayman Islands with any person, firm or corporation except in furtherance of the business of the Company carried on outside the Cayman Islands; provided that nothing in this section shall be construed as to prevent the Company effecting and concluding contracts in the Cayman Islands, and exercising in the Cayman Islands all of its powers necessary for the carrying on of its business outside the Cayman Islands.
 6. The liability of the shareholders of the Company is limited to the amount, if any, unpaid on the shares respectively held by them.
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7. The capital of the Company is **NT\$5,000,000,000** divided into **500,000,000** ordinary shares of a nominal or par value of **NT\$10.00** each provided always that subject to the Law and the Articles of Association the Company shall have power to redeem or purchase any of its shares and to sub-divide or consolidate the said shares or any of them and to issue all or any part of its capital whether original, redeemed, increased or reduced with or without any preference, priority, special privilege or other rights or subject to any postponement of rights or to any conditions or restrictions whatsoever and so that unless the conditions of issue shall otherwise expressly provide every issue of shares whether stated to be ordinary, preference or otherwise shall be subject to the powers on the part of the Company hereinbefore provided.
 8. The Company will not exercise the power contained in Section 226 of the Law to deregister in the Cayman Islands and be registered by way of continuation in some other jurisdiction.
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THE COMPANIES LAW (AS AMENDED)

COMPANY LIMITED BY SHARES

SIXTH AMENDED AND RESTATED

ARTICLES OF ASSOCIATION

OF

ASLAN PHARMACEUTICALS LIMITED

(Adopted by Special Resolution passed on 30 October 2018)

TABLE A

The Regulations contained or incorporated in Table 'A' in the First Schedule of the Law shall not apply to ASLAN PHARMACEUTICAL LIMITED (the "**Company**") and the following Articles shall comprise the Articles of Association of the Company.

INTERPRETATION

1. In these Articles the following defined terms will have the meanings ascribed to them, if not inconsistent with the subject or context:

"**10% Reserve**" has the meaning given thereto in Article 136;

"**Applicable Listing Rules**" means the relevant ROC laws, regulations, rules and code as amended, from time to time, applicable as a result of the original and continued trading or listing of any shares on any Taiwan stock exchange or securities market, including, without limitation the relevant provisions of Securities and Exchange Act, the Acts Governing Relations Between Peoples of the Taiwan Area and the Mainland Area, or any similar statute and the rules and regulations of the Taiwan authorities thereunder, and the rules and regulations promulgated by the Financial Supervisory Commission, the Taipei Exchange (formally known as GreTai Securities Market) or the Taiwan Stock Exchange;

"**Articles**" means these articles of association of the Company, as amended or substituted from time to time;

"**Audit Committee**" means the audit committee under the Board of Directors, which shall comprise solely of Independent Directors of the Company;

"**Branch Register**" means any branch register of such category or categories of Members as the Company may determine;

"**Chairman**" has the meaning given thereto in Article 96;

"**Class**" or "**Classes**" means any class or classes of Shares as may from time to time be issued by the Company;

"**Commission**" means Financial Supervisory Commission of Taiwan or any other authority for the time being administering the Securities and Exchange Act of Taiwan;

"**Constituent Company**" means an existing company that is participating in a Merger with one or more other existing companies within the meaning of the Law;

“**Directors**” and “**Board of Directors**” and “**Board**” means the directors of the Company for the time being, or as the case may be, the directors assembled as a board or as a committee thereof;

“**Directors’ Remunerations**” has the meaning given thereto in Article 136;

“**electronic**” shall have the meaning given to it in the Electronic Transactions Law (as amended) of the Cayman Islands and any amendment thereto or re-enactments thereof for the time being in force and includes every other law incorporated therewith or substituted therefore;

“**electronic communication**” means transmission to any number, address or internet website or other electronic delivery methods as otherwise decided and approved by not less than two-thirds of the vote of the Board;

“**Emerging Market**” means the emerging market board of the TPEX;

“**Employees’ Remunerations**” has the meaning given thereto in Article 136;

“**Indemnified Person**” has the meaning given thereto in Article 163;

“**Independent Director**” means a director who is an independent director as defined in the Applicable Listing Rules;

“**Law**” means the Companies Law of the Cayman Islands (as amended);

“**Memorandum of Association**” means the memorandum of association of the Company, as amended or substituted from time to time;

“**Merger**” means the merging of two or more Constituent Companies and the vesting of their undertaking, property and liabilities in one of such company as the Surviving Company within the meaning of the Law;

“**Office**” means the registered office of the Company as required by the Law;

“**Ordinary Resolution**” means a resolution passed by a simple majority of such Shareholders as, being entitled to do so, vote in person or, where proxies are allowed, by proxy at a general meeting of the Company;

“**paid up**” means paid up as to the par value and any premium payable in respect of the issue of any Shares and includes credited as paid up;

“**Person**” means any natural person, firm, company, joint venture, partnership, corporation, association or other entity (whether or not having a separate legal personality) or any of them as the context so requires;

“**preferred Shares**” has the meaning given thereto in Article 12;

“**Principal Register**”, where the Company has established one or more Branch Registers pursuant to the Law and these Articles, means the Register maintained by the Company pursuant to the Law and these Articles that is not designated by the Directors as a Branch Register;

“**Private Placement**” means issuance of securities of the Company (including Shares, options, warrants, rights attached to debt or equity securities to subscribe further for securities and other securities) to specific persons pursuant to the Applicable Listing

Rules, but excluding any employee incentive programme or issuance of Shares in connection with meeting the Company's obligations under warrants, options, convertible bonds or preferred Shares;

"Register" means the register of Members of the Company required to be kept pursuant to the Law and includes any Branch Registers established by the Company in accordance with the Law;

"Remuneration Committee" means the remuneration committee established and appointed by the Board of Directors;

"Republic of China", "ROC" or "Taiwan" means the Republic of China, its territories, its possessions and all areas subject to its jurisdiction;

"Seal" means the common seal of the Company (if adopted) including any facsimile thereof;

"Secretary" means any Person appointed by the Directors to perform any of the duties of the secretary of the Company;

"Securities and Futures Institute" means the Securities and Futures Institute in the Republic of China;

"Share" means a share in the capital of the Company. All references to "Shares" herein shall be deemed to be Shares of any or all Classes as the context may require. For the avoidance of doubt in these Articles the expression "Share" shall include a fraction of a Share;

"Share Exchange" means the transfer of all the issued shares of the Company by the Shareholders to another company in exchange for the shares issued by such company to the Shareholders;

"Shareholder" or "Member" means a Person who is registered as the holder of Shares in the Register and includes each subscriber to the Memorandum of Association pending the issue to such subscriber of the subscriber Share or Shares;

"Share Premium Account" means the share premium account established in accordance with these Articles and the Law;

"Shareholders' Service Agent" means the agent licensed by Taiwan authorities to provide certain shareholders services in accordance with the Applicable Listing Rules to the Company;

"signed" means bearing a signature or representation of a signature affixed by mechanical means or an electronic symbol or process attached to or logically associated with an electronic communication and executed or adopted by a person with the intent to sign the electronic communication;

"Special Resolution" means a special resolution of the Company passed in accordance with the Law, being a resolution passed by a majority of not less than two-thirds of such Shareholders as, being entitled to do so, vote in person or, where proxies are allowed, by proxy at a general meeting of the Company of which notice specifying the intention to propose the resolution as a special resolution has been duly given;

“Spin-off” refers to an act wherein a transferor company transfers all of its independently operated business or any single independently operated business to an existing or a newly incorporated company as consideration for that existing transferee company or newly incorporated transferee company to issue new shares to the transferor company or to shareholders of the transferor company;

“Subordinate Company” means a company:

- (a) of which the Company holds a majority of the total number of issued voting shares or to which the Company contributes a majority of the total capital amount; or
- (b) over which the Company has direct or indirect managerial control of the personnel, financial or business operations.

“Supermajority Resolution” means a resolution adopted by a majority vote of the Members at a general meeting attended by Members who represent two-thirds or more of the total outstanding shares of the Company or, if the total number of shares represented by the Members present at the general meeting is less than two-thirds of the total outstanding shares of the Company, but more than one-half of the total outstanding shares of the Company, means instead, a resolution adopted at such general meeting by the Members who represent two-thirds or more of the total number of shares entitled to vote on such resolution at such general meeting;

“Surviving Company” means the sole remaining Constituent Company into which one or more other Constituent Companies are merged within the meaning of Law;

“TPEX” means the Taipei Exchange in Taiwan which was formerly known as GreTai Securities Market;

“TDCC” means the Taiwan Depository & Clearing Corporation;

“Treasury Shares” means Shares that were previously issued but were purchased, redeemed, surrendered or otherwise acquired by the Company and not cancelled in accordance with the Law, these Articles and the Applicable Listing Rules; and

“TSE” means the Taiwan Stock Exchange.

2. In these Articles, save where the context requires otherwise:

- (a) words importing the singular number shall include the plural number and vice versa;
- (b) words importing the masculine gender only shall include the feminine gender and any Person as the context may require;
- (c) the word “may” shall be construed as permissive and the word “shall” shall be construed as imperative;
- (d) reference to a statutory enactment shall include reference to any amendment or re-enactment thereof for the time being in force;
- (e) reference to any determination by the Directors shall be construed as a determination by the Directors in their absolute discretion and shall be applicable either generally or in any particular case; and

(f) reference to "in writing" shall be construed as written or represented by any means reproducible in writing, including any form of print, lithograph, email, facsimile, photograph or telex or represented by any other substitute or format for storage or transmission for writing or partly one and partly another.

3. Subject to the last two preceding Articles, any words defined in the Law shall, if not inconsistent with the subject or context, bear the same meaning in these Articles.

PRELIMINARY

4. The business of the Company may be commenced at any time after incorporation.

5. The Office shall be at such address in the Cayman Islands as the Directors may from time to time determine. The Company may in addition establish and maintain such other offices and places of business and agencies in such places as the Directors may from time to time determine.

6. The preliminary expenses incurred in the formation of the Company and in connection with the issue of Shares shall be paid by the Company. Such expenses may be amortised over such period as the Directors may determine and the amount so paid shall be charged against income and/or capital in the accounts of the Company as the Directors shall determine.

7. The Directors shall keep, or cause to be kept, the Register at such place as the Directors may from time to time determine and, in the absence of any such determination, the Register shall be kept at the Office.

8. If the Directors consider it necessary or appropriate, the Company may establish and maintain one or more Branch Registers as well as the Principal Register at such location or locations within or outside the Cayman Islands as the Directors think fit, provided always that a duplicate of such Branch Register(s) shall be maintained with the Principal Register in accordance with the Law. The Principal Register and the Branch Register(s) shall together be treated as the Register for the purposes of the Articles.

9. For so long as any Shares are traded on the Emerging Market, the TPEX or the TSE, the record of the shareholders of the Company maintained by TDCC shall be a listed shares register.

SHARES

10. Subject to these Articles, all Shares for the time being unissued shall be under the control of the Directors who may :

(a) issue, allot and dispose of the same to such Persons, in such manner, on such terms and having such rights and being subject to such restrictions as they may from time to time determine; and

(b) grant options with respect to such Shares and issue warrants or similar instruments with respect thereto;

and, for such purposes, the Directors may reserve an appropriate number of Shares for the time being unissued.

11. The Directors may authorise the division of Shares into any number of Classes and the different Classes shall be authorised, established and designated (or re-designated as the case may be) and the variations in the relative rights (including, without limitation, voting, dividend and redemption rights), restrictions, preferences, privileges and payment obligations as between the different Classes (if any) shall be fixed and determined by the Directors.
12. The Company may issue Shares with rights which are preferential to those of ordinary Shares issued by the Company ("**preferred Shares**") with the approval of a majority of the Directors present at a meeting attended by two-thirds or more of the total number of the Directors and with the approval of a Special Resolution. Prior to the issuance of any preferred Shares approved pursuant to this Article 12, these Articles shall be amended to set forth the rights and obligations of the preferred Shares, including but not limited to the following terms, and the same shall apply to any variation of rights of preferred Shares:
 - (a) order, fixed amount or fixed ratio of allocation of Dividends and bonus on preferred Shares;
 - (b) order, fixed amount or fixed ratio of allocation of surplus assets of the Company;
 - (c) order of or restriction on the voting right(s) (including declaring no voting rights whatsoever) of preferred Shareholders;
 - (d) other matters concerning rights and obligations incidental to preferred Shares; and
 - (e) the method by which the Company is authorized or compelled to redeem the preferred Shares, or a statement that redemption rights shall not apply.
13. The issue of new Shares of the Company shall be approved by a majority of the Directors present at a meeting attended by two-thirds or more of the total number of the Directors. The issue of new Shares shall at all times be subject to the sufficiency of the authorised capital of the Company.
14. The Company shall not issue any unpaid Shares or partly paid-up Shares. The Company shall not issue shares in bearer form.
15. Where the Company increases its issued share capital by issuing new Shares for cash consideration, the Directors may reserve ten to fifteen percent of the new shares for subscription by the employees of the Company or of any of its Subordinate Companies who are determined by the Board in its reasonable discretion.
16. For so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, unless otherwise resolved by the Members in general meeting by Ordinary Resolution, if at anytime the Board resolves to issue any new Share, the Company shall subject to Applicable Listing Rules, after reserving the portion of Shares for subscription by its employees and for public offering in Taiwan pursuant to Article 15 and Article 18 respectively, first offer such remaining new Shares by a written notice and a public announcement to each then Shareholder for their subscriptions in proportion to the number of Shares held by them respectively, and shall state in the notice that if any Shareholder fails to subscribe for new Shares, his right shall be forfeited. Where a fractional percentage of the original Shares being held by a Shareholder is insufficient to subscribe for one new Share, the fractional percentages of the original Shares being held by several Shareholders may be combined for joint subscription of one or more integral new Shares or for subscription of new Shares in the name of a single Shareholder. New Shares left unsubscribed by original Shareholders may be open for public issuance or for subscription by specific person or persons through negotiation.

17. The Shareholders' pre-emptive right prescribed under Article 16 shall not apply in the event that new Shares are issued due to the following reasons or for the following purpose:
- (a) in connection with a merger with another company, or the Spin-off of the Company, or pursuant to any reorganization of the Company;
 - (b) in connection with meeting the Company's obligation under Share subscription warrants and/or options;
 - (c) in connection with meeting the Company's obligation under corporate bonds which are convertible bonds or vested with rights to acquire Shares;
 - (d) in connection with meeting the Company's obligation under preferred Shares vested with rights to acquire Shares;
or
 - (e) in connection with a Private Placement.
18. Where the Company increases its capital by issuing new Shares for cash consideration in Taiwan, the Company shall allocate 10% of the total amount of the new Shares to be issued, for offering in Taiwan to the public unless it is not necessary or appropriate, according to the Applicable Listing Rules, for the Company to conduct the aforementioned public offering. Provided however, if a percentage higher than the aforementioned 10% is resolved by a general meeting to be offered, the percentage determined by such resolution shall prevail.
19. The Company may, upon resolution by a majority votes at a meeting of the Board of Directors attended by two-thirds or more of the Directors, adopt one or more employee incentive programmes pursuant to which shares, options, warrants, or other similar instruments to acquire Shares may be granted to employees of the Company or any Subordinate Company who meet the requirements and qualifications to subscribe for Shares; provided that, in no event shall the aggregate number of shares to be issued pursuant to such employee incentive programs exceed fifteen percent (15%) of the then total issued and outstanding shares of the Company. The options, warrants, or other similar instruments to acquire Shares granted to any employee under any employee stock option plan shall be non-transferable, except to the heirs of the employees.
20. Subject to Article 49, the Company may, by Special Resolution at the most recent general meeting, transfer Treasury Shares to employees of the Company or of any of its Subordinate Company at less than the average actual repurchase price. The Company shall have listed the following matters with respect to such transfer in the notice of that general meeting and may not raise those matters by ad hoc motions:
- (a) the exercise price, the discount percentage, the bases of calculations, and the reasonableness thereof;
 - (b) the number of Treasury Shares to be transferred, the purpose, and the reasonableness thereof;
 - (c) qualification requirements for employees of the Company or of any of its Subordinate Company subscribing to the Treasury Shares, and the number of Treasury Shares they are allowed to subscribe for;
 - (d) factors affecting shareholders' equity, including:

- (1) the expensable amount, and dilution of the Company's earnings per Share;
- (2) explanation on the financial burden imposed on the Company by transferring Treasury Shares to employees at less than the average actual repurchase price.

In previous instances where the transfer of Treasury Share to the employees have been approved at general meetings and the Treasury Shares have been transferred, the aggregate number of Treasury Shares so transferred may not exceed 5 percent of the total issued Shares of the Company, and the aggregate number of Shares subscribed by any single employee may not exceed 0.5 percent of total issued Shares.

21. The Company may issue shares being subject to the restrictions as the Directors may from time to time agree with the employees for subscription by the employees of the Company or any subordinate company by a Supermajority Resolution, in which event Articles 15 and 16 shall not apply. For so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, the issuance of such shares for employees, including but not limited to the issuance amount, issuance price, and issuance conditions, shall be set in compliance with the Applicable Listing Rules.

MODIFICATION OF RIGHTS

22. Whenever the capital of the Company is divided into different Classes the rights attached to any such Class may (unless otherwise provided by the terms of issue of the Shares of that Class) only be materially adversely varied or abrogated with the sanction of a Special Resolution passes at a separate meeting of the holders of the Shares of that Class, but not otherwise. To every such separate meeting all the provisions of these Articles relating to general meetings of the Company or to the proceedings thereat shall, *mutatis mutandis*, apply, except that the necessary quorum shall be one or more Persons at least holding or representing by proxy one-half in nominal or par value amount of the issued Shares of the relevant Class (but so that if at any adjourned meeting of such holders a quorum as above defined is not present, those Shareholders who are present shall form a quorum) and that, subject to the terms of issue of the Shares of that Class, every Shareholder of the Class shall on a poll have one vote for each Share of the Class held by him.
23. The rights conferred upon the holders of the Shares of any Class issued with preferred or other rights shall not, unless otherwise expressly provided by the terms of issue of the Shares of that Class, be deemed to be materially adversely varied or abrogated by, *inter alia*, the creation, allotment or issue of further Shares ranking *pari passu* with or subsequent to them, the redemption or purchase of Shares of any Class by the Company.

CERTIFICATES

24. Subject to the provisions of the Law, the Company may issue Shares without printing share certificates for the Shares issued, and the details regarding such issue of Shares shall be recorded by TDCC in accordance with the Applicable Listing Rules. Every person whose name is entered as a member in the Register may be entitled to a certificate in the form determined by the Board of Directors if the Board of Directors resolves that a share certificate shall be issued.
25. In the event the Board of Directors resolves that share certificates shall be issued pursuant to Article 24 hereof, the Company shall deliver the share certificates to the subscribers within thirty days from the date such share certificates may be issued

pursuant to the Law, the Memorandum of Association, the Articles, and the Applicable Listing Rules, and shall make a public announcement prior to the delivery of such share certificates pursuant to the Applicable Listing Rules.

FRACTIONAL SHARES

26. Subject to the Applicable Listing Rules and these Articles, the Directors may issue fractions of a Share and, if so issued, a fraction of a Share shall be subject to and carry the corresponding fraction of liabilities (whether with respect to nominal or par value, premium, contributions, calls or otherwise), limitations, preferences, privileges, qualifications, restrictions, rights (including, without prejudice to the generality of the foregoing, voting and participation rights) and other attributes of a whole Share. If more than one fraction of a Share of the same Class is issued to or acquired by the same Shareholder such fractions shall be accumulated.

TRANSFER OF SHARES

27. Subject to the Law, Shares issued by the Company shall be freely transferable, provided that any Shares issued or transferred to the employees of the Company or of any of its Subordinate Companies pursuant to Articles 15 or 21 or 41 may be subject to transfer restrictions for a specific period of time as may be agreed with the Company and such employee and such period for the Shares issued or transferred to the employees pursuant to Article 15 or 41 shall be no longer than two years.
28. The instrument of transfer of any Share shall be in any usual or common form or such other form as the Directors may, in their absolute discretion, approve and be executed by or on behalf of the transferor and if so required by the Directors, shall also be executed on behalf of the transferee and shall be accompanied by the certificate (if any) of the Shares to which it relates and such other evidence as the Directors may reasonably require to show the right of the transferor to make the transfer. The transferor shall be deemed to remain a Shareholder until the name of the transferee is entered in the Register in respect of the relevant Shares. Subject to the requirements of applicable laws of the Cayman Islands, transfers of uncertificated Shares which are registered in the Emerging Market or listed in the TPEX or the TSE may be effected by any method of transferring or dealing in securities introduced by the TPEX or TSE or operated in accordance with the Applicable Listing Rules as appropriate.
29. The Board may decline to register any transfer of any Share unless:
- (a) the instrument of transfer is lodged with the Company, accompanied by the certificate (if any) for the Shares to which it relates and such other evidence as the Board may reasonably require to show the right of the transferor to make the transfer;
 - (b) the instrument of transfer is in respect of only one class of Shares;
 - (c) the instrument of transfer is properly stamped, if required; or
 - (d) in the case of a transfer to joint holders, the number of joint holders to whom the Share is to be transferred does not exceed four.
30. The registration of transfers may be suspended when the Register is closed in accordance with Article 53.

31. All instruments of transfer that are registered shall be retained by the Company, but any instrument of transfer that the Directors decline to register shall (except in any case of fraud) be returned to the Person depositing the same.

TRANSMISSION OF SHARES

32. The legal personal representative of a deceased sole holder of a Share shall be the only Person recognised by the Company as having any title to the Share. In the case of a Share registered in the name of two or more holders, the survivors or survivor, or the legal personal representatives of the deceased holder of the Share, shall be the only Person recognised by the Company as having any title to the Share.
33. Any Person becoming entitled to a Share in consequence of the death or bankruptcy of a Shareholder shall upon such evidence being produced as may from time to time be required by the Directors, have the right either to be registered as a Shareholder in respect of the Share or, instead of being registered himself, to make such transfer of the Share as the deceased or bankrupt Person could have made. If the person so becoming entitled shall elect to be registered himself as holder he shall deliver or send to the Company a notice in writing signed by him stating that he so elects, but the Directors shall, in either case, have the same right to decline or suspend registration as they would have had in the case of a transfer of the Share by the deceased or bankrupt Person before the death or bankruptcy.
34. A Person becoming entitled to a Share by reason of the death or bankruptcy of a Shareholder shall be entitled to the same dividends and other advantages to which he would be entitled if he were the registered Shareholder, except that he shall not, before being registered as a Shareholder in respect of the Share, be entitled in respect of it to exercise any right conferred by membership in relation to meetings of the Company; provided however, that the Directors may at any time give notice requiring any such person to elect either to be registered himself or to transfer the Share, and if the notice is not complied with within ninety days, the Directors may thereafter withhold payment of all dividends, bonuses or other monies payable in respect of the Share until the requirements of the notice have been complied with.

ALTERATION OF SHARE CAPITAL

35. The Company may from time to time by Ordinary Resolution increase its authorized share capital by such amount as it thinks expedient.
36. The Company may also by Special Resolution:
- (a) change its name;
 - (b) alter or add to these Articles;
 - (c) alter or add to the Memorandum of Association with respect to any objects, powers or other matters specified therein; and
 - (d) reduce its share capital and any capital redemption reserve in any manner authorised by law.
37. The Company may also by Supermajority Resolution:
- (a) enter into, amend, or terminate any contract for lease of its business in whole, or for entrusting business, or for regular joint operation with others;

- (b) transfer the whole or any material part of its business or assets;
- (c) take over the transfer of another's whole business or assets, which will have a material effect on the business operation of the Company;
- (d) effect any merger (other than a Merger) or Spin-off of the Company in accordance with the Applicable Listing Rules;
- (e) grant waiver to the Director's engaging in any business within the scope of the Company's business;
- (f) discharge or remove any Director;
- (g) resolve to capitalize an amount standing to the credit of reserves (including a share premium account and/or profit account), whether or not available for distribution, or subject to Cayman Islands law, distribute cash out of legal reserve, the premium paid on the issuance of any share and income from endowments received by the Company to the Shareholders
- (h) issue employee stock options where the exercise price for such options is lower than the closing price of the Shares of the Company as of the issuance date (provided such exercise price shall not be less than the par value per Share).

37A. Notwithstanding anything to the contrary in these Articles, if the Company proposes to effect any merger, transfer and assumption of its business or assets, share swap or spin-off, as a result of which the Company would cease to be a TPEX-listed company and the surviving company, transferee company, existing company or newly set-up company (depending on the circumstances) is not a company listed on TSE or TPEX, such transaction must be approved by the Shareholders representing two thirds of the issued and outstanding shares of the Company.

38. Subject to the Law, these Articles and the quorum requirement under the Applicable Listing Rules, with regard to the dissolution procedures of the Company, the Company shall pass:

- (a) an Ordinary Resolution, if the Company resolves that it be wound up voluntarily because it is unable to pay its debts as they fall due; or
- (b) a Special Resolution, if the Company resolves that it be wound up voluntarily for reasons other than the reason stated in Article 38 (a) above.

39. In the event any of the resolutions with respect to the paragraph (a), (b), or (c) of the preceding Article 37 is adopted by the Shareholders at a general meeting or a Merger is approved in accordance with the provisions of the Law, any Shareholder who has notified the Company in writing of his objection to such proposal prior to such meeting and subsequently raised his objection at the meeting may request the Company to purchase all of his Shares at the then prevailing fair price; provided, however, that no Shareholder shall have the abovementioned appraisal right if the Shareholders at a general meeting resolve on the dissolution of the Company after the completion of transfer of business or assets under the paragraph (b) of Article 37. In the event any part of the Company's business is Spun Off or involved in any merger or Share Exchange with any other company, the Shareholder, who has forfeited his right to vote on such matter and expressed his dissent therefor, in writing or verbally (with a record) before or during the general meeting, may request the Company to buy back all of his Shares at the then prevailing fair price. In the event the Company fails to reach such agreement

with the Shareholder within sixty days after the resolution date, the Shareholder may, within thirty days after such sixty-day period, file a petition to any competent court of Taiwan for a ruling on the appraisal price, and to the extent that the ruling is capable of enforcement and recognition in the relevant jurisdiction, such ruling by such Taiwan court shall be binding and conclusive as between the Company and requested Shareholder solely with respect to the appraisal price.

REDEMPTION AND PURCHASE OF SHARES

40. Subject to the Law, the Applicable Listing Rules and these Articles, the Company may issue preferred Shares on terms that they are to be redeemed or are liable to be redeemed at the option of the Company or the Shareholder on such terms and in such manner as the Company may by Special Resolution, before the issue of such Shares, determine. Subject to the Law, the preferred shares shall be redeemable pursuant to the terms; provided that the privileges accorded to preferred shareholders by these Articles shall not be impaired.
41. For so long as the Shares are registered in the Emerging Market or the TPEX or TSE, matters with respect to the purchase of its own Shares by the Company shall be approved by the Board of Directors in compliance with the Applicable Listing Rules and the Law.
42. Notwithstanding Articles 40 and 41 and subject to the Law, the Company may with the sanction of an Ordinary Resolution purchase and cancel its own Shares out of the share capital of the Company. The number of Shares to be repurchased and cancelled pursuant to this Article shall be pro rata among the Shareholders in proportion to the number of Shares held by each such Shareholder.

The amount payable to the Shareholders in connection with a repurchase of Shares out of the share capital of the Company may be paid in cash or by way of delivery of assets in specie (i.e., non-cash). The assets to be delivered and the amount of such substitutive share capital in connection with a repurchase of Shares out of the share capital of the Company shall be approved by the Shareholders at the general meeting and shall be subject to consent by the Shareholder receiving such assets. Prior to the general meeting considering such repurchase, the Board of Directors shall have the value of assets to be delivered and the amount of such substitutive share capital in respect of repurchase of the Shares audited and certified by an ROC certified public accountant.
43. The number of Shares purchased by the Company pursuant to the preceding Article 41 shall not exceed ten percent (10%) of the total number of issued Shares of the Company. The total price of the Shares so purchased shall not exceed the sum of retained earnings plus the premium paid on the issuance of any share and income from endowments received by the Company.
44. The Directors or managerial officers of the Company, or their spouse, minor children (under age of 20), or any other persons who hold the Shares for the benefits of the Directors, officers, their spouses or minor children, shall not sell or otherwise transfer their Shares during the period when the Company is purchasing its own Shares pursuant to the Article 41.
45. The resolution for the purchase of the Shares by the Company pursuant to the Article 41 and the implementation thereof shall be reported in the most recent general meeting regardless of whether the Company does purchase the Shares in accordance with such resolution or not.

46. Any Share in respect of which notice of redemption has been given shall not be entitled to participate in the profits of the Company in respect of the period after the date specified as the date of redemption in the notice of redemption.
47. The redemption, purchase of any Share shall not be deemed to give rise to the redemption, purchase of any other Share.
48. Subject to the Law, the Applicable Listing Rules and Article 42, the Directors may when making payments in respect of redemption or purchase of Shares, if authorised by the terms of issue of the Shares being redeemed or purchased or with the agreement of the holder of such Shares, make such payment either in cash or in specie.

TREASURY SHARES

49. Subject to Article 41, Shares that the Company purchases, redeems or acquires (by way of surrender or otherwise) may, at the option of the Company, be cancelled immediately or held as Treasury Shares in accordance with the Law. In the event that the Directors do not specify that the relevant Shares are to be held as Treasury Shares, such Shares shall be cancelled.
50. No dividend may be declared or paid, and no other distribution (whether in cash or otherwise) of the Company's assets (including any distribution of assets to members on a winding up) and the allotment of bonus shares may be declared or paid in respect of a Treasury Share.
51. The Company shall be entered in the Register as the holder of the Treasury Shares provided that:
 - (a) the Company shall not be treated as a member for any purpose and shall not exercise any right in respect of the Treasury Shares, and any purported exercise of such a right shall be void;
 - (b) a Treasury Share shall not be voted, directly or indirectly, at any meeting of the Company and shall not be counted in determining the total number of issued shares at any given time, whether for the purposes of these Articles or the Law.
52. Subject to Articles 20 and 41 and the Applicable Listing Rules, Treasury Shares may be disposed of by the Company on such terms and conditions as determined by the Directors.

CLOSING REGISTER OR FIXING RECORD DATE

53. For the purpose of determining those Members that are entitled to receive notice of, attend or vote at any meeting of Members or any adjournment thereof, or those Members that are entitled to receive payment of any dividend, or in order to make a determination as to who is a Member for any other purpose, the Directors may provide that the Register shall be closed for transfers for a stated period. For so long as the Shares are registered in the Emerging Market or listed in the TPEX or TSE, the Register shall be closed not less than the minimum period, as prescribed by the Applicable Listing Rules.
54. The Directors shall make a public announcement of the closing of the Register on the website designated by the Commission and the TPEX or TSE pursuant to the Applicable Listing Rules, if required.

GENERAL MEETINGS

55. All general meetings other than annual general meetings shall be called extraordinary general meetings.
56. The Board may, whenever they think fit, convene a general meeting of the Company; provided that the Company shall in each year hold a general meeting as its annual general meeting within six months after close of each fiscal year and shall specify the meeting as such in the notices calling it.
57. At these meetings the report of the Directors (if any) shall be presented. For so long as the Shares are registered in the Emerging Market or listed in the TPEX or TSE, all general meetings shall be held in Taiwan. If the Directors resolve to hold a general meeting outside Taiwan or the shareholder(s) obtain the approval of the Commission to hold a general meeting outside Taiwan, the Company or such shareholders shall apply for the approval of the TPEX (or the TSE, if applicable) thereof within two days after the board resolution or the Commission's approval (as applicable). Where a general meeting is to be held outside Taiwan, the Company shall engage a designated institute approved by the Commission and the TPEX (or the TSE, if applicable) to handle the administration of such general meeting and shall allow the votes of the Shareholders to be exercised in writing or by way of electronic transmission.
58. Extraordinary general meetings shall also be convened on the requisition in writing of any Shareholder or Shareholders entitled to attend and vote at general meetings of the Company holding at least three percent (3%) of the paid up voting share capital of the Company for a period of one year or a longer time deposited at the Office or the Shareholders' Service Agent specifying the subjects for discussion and the reasons, and if the Board fails to give a notice for convening such meeting within 15 days after the date of such deposit, for so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, the requisitionists themselves may convene the general meeting in the same manner, as nearly as possible, as that in which general meetings may be convened by the Directors, and all reasonable expenses incurred by the requisitionists as a result of the failure of the Directors to convene the general meeting shall be reimbursed to them by the Company. However, any meeting convened pursuant to this Article shall be held within three months after the expiration of the said 15-day period.
59. If at any time there are no Directors, any Shareholder or Shareholders holding at least three percent (3%) of the paid up voting share capital of the Company for a period of one year or a longer time may, subject to the approval of the Commission for so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, convene a general meeting in the same manner as nearly as possible as that in which general meetings may be convened by the Directors.

NOTICE OF GENERAL MEETINGS

60. At least thirty and fifteen days' notices in writing shall be given for any annual and extraordinary general meetings, respectively. Every notice shall be exclusive of the day on which it is given or deemed to be given and of the day for which it is given and shall specify the place, the day and the hour of the meeting and the general nature of the business. The notice for a general meeting may be given by means of electronic communication if the Company obtains prior consent by the individual recipients. The Company shall make a public announcement on the website designated by the Commission and the TPEX or TSE 30 days before an annual general meeting or 15 days before an extraordinary general meeting, regarding the meeting notice, proxy form, explanatory materials relating to proposals for ratification, matters for resolution, election or dismissal of directors and other matters on the meeting agenda. Where votes of shareholders are to be exercised by way of a written ballot, a copy of the materials referred to in the preceding provision and the written ballot shall also be sent to the Shareholders.

61. The following matters shall be specified in the notice of a general meeting, and shall not be proposed as ad hoc motions:
- (a) election or discharge of directors;
 - (b) amendments to these Articles;
 - (c) dissolution, merger, Share Exchange or Spin-off of the Company;
 - (d) repurchasing and cancelling Shares out of the share capital of the Company pursuant to Article 42;
 - (e) applying for the cessation of its status as a public company;
 - (f) entering into, amendment to, or termination of any contract for lease of its business in whole, or for entrusting business, or for regular joint operation with others;
 - (g) the transfer of the whole or any material part of its business or assets;
 - (h) taking over another's whole business or assets, which will have a material effect on the business operation of the Company;
 - (i) carrying out private placement of its securities;
 - (j) granting waiver to the Director's engaging in any business within the scope of business of the Company;
 - (k) distributing part or all of its dividends or bonus by way of issuance of new Shares;
 - (l) capitalization of the statutory reserve or any other amount prescribed under Article 151 hereof;
 - (m) issuance of employee stock options where the exercise price for such options is lower than the closing price of the Shares of the Company as of the issuance date; and
 - (n) matters with respect to the issuance of restricted Shares for the employees as required by the Applicable Listing Rules.
62. For so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, the Company shall prepare a manual for each general meeting and the relevant materials, which will be made available to all Shareholders and shall be published on the website designated by the Commission and the TPEX or TSE pursuant to the Applicable Listing Rules.

PROCEEDINGS AT GENERAL MEETINGS

63. No business shall be transacted at any general meeting unless a quorum of Shareholders is present at the time when the meeting proceeds to business. Save as otherwise provided by these Articles, the holders of Shares being more than an aggregate of one-half of all Shares in issue present in person or by proxy and entitled to vote shall be a quorum for all purposes.
64. Shareholder(s) holding one percent or more of the total number of issued Shares immediately prior to the relevant book close period may propose in writing to the Company a proposal for discussion at an annual general meeting. Where the number of

Shares held by the Shareholder(s) making the said proposal is less than one percent (1%) of the total number of issued Shares, or where the subject (the matter) of the said proposal cannot be settled or resolved by a resolution at a general meeting, or that a proposal contains more than one matter, or that a proposal is submitted on a day beyond the deadline fixed and announced by the Company for accepting shareholders' proposals, such proposal shall not be included in the agenda.

65. The Chairman, if any, of the Board of the Directors shall preside as chairman at every general meeting of the Company convened by the Board of the Directors. For a general meeting convened by any other person having the convening right, such person shall act as the chairman of that meeting; provided that if there are two or more persons jointly having the convening right, the chairman of the meeting shall be elected from those persons.
66. If there is no such chairman, or if at any general meeting he is not present within fifteen minutes after the time appointed for holding the meeting or is unwilling to act as chairman, any Director nominated by the Directors shall preside as chairman, failing which the Shareholders present shall choose any Person present to be chairman of that meeting.
67. Unless otherwise expressly provided herein, if a quorum is not present at the time appointed for the general meeting or if during such a general meeting a quorum ceases to be present, the chairman may postpone the general meeting to a later time, provided, however, that the maximum number of times a general meeting may be postponed shall be two and the total time postponed shall not exceed one hour. If the general meeting has been postponed for two times, but at the postponed general meeting a quorum is still not present, the chairman shall declare the general meeting is dissolved, and if it is still necessary to convene a general meeting, it shall be reconvened as a new general meeting in accordance with these Articles. The chairman may by Ordinary Resolution (and shall if so directed by the meeting) adjourn a meeting from time to time and from place to place, but no business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place. When a meeting, or adjourned meeting, is adjourned for more than five (5) days, notice of the adjourned meeting shall be given as in the case of an original meeting. Save as aforesaid it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.
68. At any general meeting a resolution put to the vote of the meeting shall be decided on a poll. The number or proportion of the votes in favour of, or against, that resolution shall be recorded in the minutes of the meeting.
69. Unless otherwise expressly required by the Law or these Articles, any matter which has been presented for resolution, approval, confirmation or adoption by the Shareholders at any general meeting may be passed by an Ordinary Resolution.
70. The minutes of the general meeting shall be distributed to each Shareholder after the meeting and/or made public pursuant to the Applicable Listing Rules.
71. In the case of an equality of votes, the chairman of the meeting shall not be entitled to a second or casting vote.

VOTES OF SHAREHOLDERS

72. Subject to any rights and restrictions for the time being attached to any Share, every Shareholder and every Person representing a Shareholder by proxy shall have one vote for each Share of which he or the Person represented by proxy is the holder. For so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, subject to the laws of the Cayman Islands and in accordance with the Applicable Listing Rules, a Shareholder shall not exercise the votes with respect to the Shares he/it holds separately unless he/it holds certain Shares for the benefit of others; the qualifications, scope, methods of exercise, operating procedures and other matters with respect to the exercise of votes separately by the Shareholders shall be in compliance with the Applicable Listing Rules.
73. No vote may be exercised with respect to any of the following Shares and such Shares shall not be counted in determining the number of issued Shares:
- (a) the Shares held by any subsidiary of the Company, where the total number of voting shares or total shares equity held by the Company in such a subsidiary represents more than one half of the total number of voting shares or the total shares equity of such a subsidiary; or
 - (b) the Shares held by another company, where the total number of the shares or total shares equity of that company held by the Company and its subsidiaries directly or indirectly represents more than one half of the total number of voting shares or the total share equity of such a company.

For so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, if a Director gives security over more than 50% of the number of Shares (the "Pledged Shares") he/it held at the time he/it was elected as a Director (the "Initial Shares"), no vote may be exercised with respect to the Shares representing the difference between the Pledged Shares and 50% of the Initial Shares, and such Shares representing the difference between the Pledged Shares and 50% of the Initial Shares shall not be counted in the number of the votes casted by the Shareholders present at the general meeting. The voting restriction referred to in the preceding provision shall also apply to such Shares held by a Person who ceases to be a Director during the period when the Register is closed for transfer for the purpose of the same general meeting.

74. In the case of joint holders, the joint holders shall select among them a representative for the exercise of their shareholder's rights and the vote of their representative who tenders a vote whether in person or by proxy shall be accepted to the exclusion of the votes of the other joint holders.
75. A Shareholder of unsound mind, or in respect of whom an order has been made by any court having jurisdiction in mental illness, may vote by his committee, or other Person in the nature of a committee appointed by that court, and any such committee or other Person, may vote by proxy.
76. A Shareholder may appoint a proxy to attend a general meeting on his behalf by executing a proxy prepared by the Company stating therein the scope of power authorized to the proxy. A Shareholder may only execute one proxy and appoint one proxy for each general meeting, and shall serve such written proxy to the Company no later than five (5) days prior to the meeting date. In case the Company receives two or more written proxies from one Shareholder, the first one arriving at the Company shall prevail unless an explicit statement to revoke the previous written proxy is made in the

proxy which comes later. In case a Shareholder who has submitted a proxy appointing a person as his or her proxy to attend the general meeting on his or her behalf intends to attend the general meeting in person or to submit his votes by way of a written ballot or by way of electronic transmission, he shall, at least two days prior to the date of the meeting revoke such proxy. If a Shareholder who has submitted a proxy does not submit such a revocation before the prescribed time, the appointment of that person as his or her proxy and the vote casted by that person as his or her proxy shall prevail.

77. The instrument appointing a proxy shall be in the form approved by the Board and be expressed to be for a particular meeting only.
78. The instrument appointing a proxy shall be in writing under the hand of the appointor or of his attorney duly authorised in writing or, if the appointor is a corporation, either under Seal or under the hand of an officer or attorney duly authorised. A proxy need not be a Shareholder.
79. Except for trust enterprises organized under the laws of the ROC or Shareholders' Service Agents approved by Taiwan competent authorities, when a person who acts as the proxy for two or more Shareholders, the number of votes represented by him shall not exceed three percent (3%) of the total number of votes of the Company and the portion of excessive votes represented by such proxy shall not be counted.
80. For so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, the use and solicitation of proxies shall be in compliance with the Applicable Listing Rules, including but not limited to "Regulations Governing the Use of Proxies for Attendance at Shareholder Meetings of Public Companies".
81. A Shareholder cannot exercise his own vote or by proxy on behalf of another Shareholder in respect of any contract or proposed contract or arrangement if he may be interested therein. Such Shares shall not be counted in determining the number of votes of the Shareholders present at the said meeting with regard to such resolution, but such Shares may be counted in determining the number of Shares represented at the meeting for the purposes of determining the quorum.
82. The votes may be exercised by way of a written ballot or by way of electronic transmission if the method for exercising the votes has been described in the notice of the general meeting. The Company shall adopt the electronic transmission as one of the methods for exercising the votes if so required pursuant to the Applicable Listing Rules. Where the Company allows the votes of the Shareholders to be exercised by way of a written ballot or by way of electronic transmission, it shall have listed all proposals and matters in the notice that general meeting and may not raise any matter by ad hoc motions; the Company shall adopt the candidate nomination mechanism in accordance with the Applicable Listing Rules if the Shareholders will elect directors at such general meeting.
83. A Shareholder who exercises his votes by way of a written ballot or by way of electronic transmission as set forth in the preceding Article 82 shall be deemed to have, to the extent permitted by the Cayman Islands law and the Applicable Listing Rules, appointed the chairman of the meeting as such Shareholder's proxy and such appointment shall not be treated as an appointment of any proxy as defined under the Applicable Listing Rules but any Shareholder voting in such manner shall be deemed to waive notice of, and the right to vote in regard to, any ad hoc motion or amendment to the original agenda items to be resolved at the said general meeting, and shall therefore not be entitled to such notice or right to vote. The chairman of the meeting shall vote on behalf of such Shareholders according to their voting instructions. In the event that the chairman of the

meeting does not vote on behalf of such Shareholders according to their voting instructions, such votes shall not be counted in determining the number of votes of the Shareholders present at the said meeting provided that such shares may be counted in determining the number of shares of the Shareholders present at such general meeting for the purpose of determining the quorum.

84. A Shareholder shall submit his vote by way of a written ballot or by way of electronic transmission to the Company no later than the second (2nd) day prior to the scheduled meeting date of the general meeting; whereas if two or more such written ballot or electronic transmission are submitted to the Company, the proxy deemed to be given to the chairman of the general meeting pursuant to Article 82 by the first written ballot or transmission shall prevail unless it is expressly included in the subsequent vote by written ballot or electronic transmission that the original vote submitted by written ballot or electronic transmission be revoked.
85. In case a Shareholder who has exercised his votes by way of a written ballot or by way of electronic transmission intends to attend the general meeting in person, he shall, at least two days prior to the date of the meeting revoke such vote by written ballot or electronic transmission and such revocation shall constitute a revocation of the proxy deemed to be given to the chairman of the general meeting pursuant to Article 84. If a Shareholder who has submitted his or her vote in writing or by way of electronic transmission pursuant to Article 83 does not submit such a revocation before the prescribed time, his or her vote by written ballot or electronic transmission and the proxy deemed to be given to the chairman of the general meeting pursuant to Article 83 shall prevail.
86. If a Shareholder has submitted his or her vote in writing or by way of electronic transmission pursuant to Article 83, and has subsequently submitted a proxy appointing a person as his or her proxy to attend the general meeting on his or her behalf, the subsequent appointment of that person as his or her proxy shall be deemed to be a revocation of such Shareholder's deemed appointment of the chairman of the general meeting as his or her proxy pursuant to Article 83 and the vote casted by that person subsequently appointed as his or her proxy shall prevail.
87. In case the procedure for convening a general meeting of Members or the method of adopting resolutions is in violation of the Law, Applicable Listing Rules or these Articles, a Shareholder may, within thirty (30) days from the date of the resolution, submit a petition for an appropriate remedy to the court of the Cayman Islands or Taiwan, and if Taiwan, the Taipei District Court as the court of first instance to the extent available under the relevant laws.

CORPORATIONS ACTING BY REPRESENTATIVES AT MEETINGS

88. Any government or corporation which is a Shareholder or a Director may by resolution of its directors or other governing body authorise such Person as it thinks fit to act as its representative at any meeting of the Company or of any meeting of holders of a Class or of the Board of Directors or of a committee of Directors, and the Person so authorised shall be entitled to exercise the same powers on behalf of the government/corporation which he represents as that government/corporation could exercise if it were an individual Shareholder or Director.

DIRECTORS

89. Unless otherwise determined by the Company in general meeting, the number of Directors shall be no less than five Directors and no more than nine Directors, the exact number of Directors to be determined from time to time solely by an Ordinary Resolution of the general meeting. For so long as the Shares are listed on the TPEX or TSE, the Directors shall include such number of Independent Directors as applicable law, rules or regulations or the Applicable Listing Rules require for a foreign issuer.
90. For so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, the qualifications, composition, election, removal, duties and powers and other relevant matters of Directors, Independent Directors, Audit Committee and Remuneration Committee shall be in compliance with the Applicable Listing Rules.
91. The Shareholders may in a general meeting appoint natural person or corporation to be a Director. At a general meeting of election of Directors, the number of votes exercisable in respect of one Share shall be the same as the number of directors to be elected, and the total number of votes per share may be consolidated for election of one candidate or may be split for election of two or more candidates. A candidate to whom the ballots cast represent a prevailing number of votes shall be deemed a director so elected.
92. So long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, the Company shall adopt a candidate nomination mechanism for the election of the Directors and Independent Directors which is in compliance with Applicable Listing Rules. The rules and procedures for such candidate nomination shall be in accordance with policies established by the Directors and by an Ordinary Resolution from time to time, which policies shall be in accordance with the Law, these Articles and the Applicable Listing Rules.
93. Subject to these Articles, the term for which a Director will hold office shall be three years; thereafter he/she may be eligible for re-election. In case no election of new Directors is effected after expiration of the term of office of the existing Directors, the term of office of such Directors shall be extended until the time new Directors are elected and assume their office.
94. A Director may be discharged at any time by a Supermajority Resolution adopted at a general meeting. If a Director is discharged during the term of his/her office as a director without good cause, such Director may make a claim against the Company for any and all damages sustained by him/her as a result of such discharge.
95. If prior to the expiration of the term of the existing Directors, the shareholders elect new Directors to replace all existing Directors, unless otherwise resolved at such general meeting, the existing Directors' office shall be deemed discharged immediately upon the appointment of such new Directors.
96. The Board of Directors shall have a Chairman (the "**Chairman**") elected and appointed by a majority of the Directors present at the Board meeting the quorum of which shall be two-thirds of all of the Directors then in office. The period for which the Chairman will hold office will also be determined by a majority of the Directors present at the Board meeting with a quorum of at least two-thirds of all of the Directors then in office. The Chairman shall preside as chairman at every meeting of the Board. To the extent the Chairman is not present at a meeting of the Board of Directors within fifteen minutes after the time appointed for holding the same, the attending Directors may choose one of their number to be the chairman of the meeting.

97. The Board may, from time to time, and except as required by the applicable laws and Applicable Listing Rules, adopt, institute, amend, modify or revoke the corporate governance policies or initiatives, which shall be intended to set forth the policies of the Company and the Board on various corporate governance related matters as the Board shall determine by resolution from time to time.
98. A Director shall not be required to hold any Shares in the Company by way of qualification.

DIRECTORS' FEES AND EXPENSES

99. The remuneration of the Directors may only be paid in cash. The amount of such remuneration is authorized to be decided by the Board of Directors, taking into account suggestions made by the Remuneration Committee, the extent and value of the services provided for the management of the Company and the standard of the same industry worldwide. Each Director shall be entitled to be repaid or prepaid all travelling, hotel and incidental expenses reasonably incurred or expected to be incurred by him in attending meetings of the Board or committees of the Board or general meetings or separate meetings of any class of Shares or of debentures of the Company or otherwise in connection with the discharge of his duties as a Director.
100. Any Director who, by request, goes or resides abroad for any purpose of the Company or who performs services which in the opinion of the Board go beyond the ordinary duties of a Director may be paid such extra remuneration (whether by way of salary, commission, participation in profits or otherwise) as the Board may determine and such extra remuneration shall be in addition to or in substitution for any ordinary remuneration provided for by or pursuant to any other Article.

ALTERNATE DIRECTOR

101. Any Director may in writing appoint another Director to be his alternate and, save to the extent provided otherwise in the form of appointment, such alternate shall have authority to act in such Director's place at any meeting of the Directors at which he is unable to be present. Every such alternate shall be entitled to attend and vote at meetings of the Directors as a Director when the Director appointing him is not personally present and to have a separate vote on behalf of the Director he is representing in addition to his own vote. A Director may at any time in writing revoke the appointment of an alternate appointed by him. Such alternate shall not be an officer of the Company. The remuneration of such alternate shall be payable out of the remuneration of the Director appointing him and the proportion thereof shall be agreed between them.
102. Any Director may appoint another Director to be the proxy of that Director to attend and vote on his behalf, in accordance with instructions given by that Director at a meeting or meetings of the Directors which that Director is unable to attend personally. A proxy of a Director shall accept an appointment to act as the proxy of one other Director only. The instrument appointing the proxy shall be in writing under the hand of the appointing Director and shall be in any usual or common form or such other form as the Directors may approve, and must be lodged with the chairman of the meeting of the Directors at which such proxy is to be used, or first used, prior to the commencement of the meeting.

POWERS AND DUTIES OF DIRECTORS

103. Subject to the Law, these Articles, Applicable Listing Rules and to any resolutions passed in a general meeting, the business of the Company shall be managed by the Directors, who may pay all expenses incurred in setting up and registering the Company and may exercise all powers of the Company. No resolution passed by the Company in general meeting shall invalidate any prior act of the Directors that would have been valid if that resolution had not been passed.
104. A Director shall have loyalty and shall exercise due care of a good administrator in conducting the business operations of the Company; and if he/she has acted contrary thereto, he/she may be liable for the damages sustained by the Company therefrom. If the Director does anything for himself/herself or on behalf of another person in violation of the preceding provision subject to Cayman Islands law the Shareholders may, by Ordinary Resolution, consider the benefits to such Director as a result of such act as benefits of the Company and request the relevant Director to return the benefits. If a Director has, in the course of conducting the business operations of the Company, violated any provision of the applicable laws and/or regulations and thus caused damages to any other person, subject to Cayman Islands law, he/she shall be liable, jointly and severally, for the damages to such other person.
- A managerial officer of the Company shall have the same liabilities as those of a Director in carrying out his/her duties.
105. The Directors may from time to time appoint any Person, whether or not a Director to hold such office in the Company as the Directors may think necessary for the administration of the Company, including but not limited to, the office of the chief executive officer, president, one or more vice-presidents, chief financial officer or controller, treasurer, assistant treasurer, or manager, and for such term and at such remuneration (whether by way of salary or commission or participation in profits or partly in one way and partly in another), and with such powers and duties as the Directors may think fit. Any Person so appointed by the Directors may be removed by the Directors. The Directors may also appoint one or more of their number to the office of managing director upon like terms, but any such appointment shall ipso facto determine if any managing director ceases from any cause to be a Director, or if the Company by Supermajority Resolution resolves that his tenure of office be terminated.
106. The Directors may appoint a Secretary (and if need be an assistant Secretary or assistant Secretaries) who shall hold office for such term, at such remuneration and upon such conditions and with such powers as they think fit. Any Secretary or assistant Secretary so appointed by the Directors may be removed by the Directors.
107. The Directors may delegate any of their powers to committees consisting of such member or members of their body as they think fit; any committee so formed shall in the exercise of the powers so delegated conform to any regulations that may be imposed on it by the Directors.
108. Notwithstanding anything contained in these Articles and to the extent as required by the Applicable Listing Rules, the Company shall establish a Remuneration Committee to review the salary, stock options, and any other substantive incentive measures for Directors and managerial officers of the Company. The composition, power and relevant matters of the Remuneration Committee shall be subject to the Applicable Listing Rules.

109. The Directors may from time to time and at any time by power of attorney (whether under Seal or under hand) or otherwise appoint any company, firm or Person or body of Persons, whether nominated directly or indirectly by the Directors, to be the attorney or attorneys of the Company for such purposes and with such powers, authorities and discretion (not exceeding those vested in or exercisable by the Directors under these Articles) and for such period and subject to such conditions as they may think fit, and any such power of attorney or other appointment may contain such provisions for the protection and convenience of Persons dealing with any such attorney as the Directors may think fit, and may also authorise any such attorney to delegate all or any of the powers, authorities and discretion vested in him. For so long as the Shares are registered in the Emerging Market or listed in the TPEX or TSE, the Company shall appoint in Taiwan a litigious and non-litigious agent who shall also be the responsible person under the Applicable Listing Rules in Taiwan. Such representative shall have a domicile or residence within the territory of Taiwan.
110. The Directors may from time to time provide for the management of the affairs of the Company in such manner as they shall think fit and the provisions contained in Articles 111, 112 and 113 shall not limit the general powers conferred by this Article.
111. The Directors from time to time and at any time may establish any committees, local boards or agencies for managing any of the affairs of the Company and may appoint any Persons to be members of such committees or local boards and may appoint any managers or agents of the Company and may fix the remuneration of any such Persons.
112. The Directors from time to time and at any time may delegate to any such committee, local board, manager or agent any of the powers, authorities and discretions for the time being vested in the Directors and may authorise the members for the time being of any such local board, or any of them to fill any vacancies therein and to act notwithstanding vacancies and any such appointment or delegation may be made on such terms and subject to such conditions as the Directors may think fit and the Directors may at any time remove any Person so appointed and may annul or vary any such delegation, but no Person dealing in good faith and without notice of any such annulment or variation shall be affected thereby.
113. Any such delegates as aforesaid may be authorised by the Directors to sub-delegate all or any of the powers, authorities, and discretion for the time being vested in them.
114. The Company shall establish an Audit Committee pursuant to the Applicable Listing Rules. The composition and qualification of the members of the Audit Committee shall be subject to Applicable Listing Rules.
115. The power and authority of the Audit Committee shall be subject to the Applicable Listing Rules.

BORROWING POWERS OF DIRECTORS

116. Subject to these Articles and the Applicable Listing Rules, the Directors may exercise all the powers of the Company to borrow money and to mortgage or charge its undertaking and property, to issue debentures, debenture stock and other securities whenever money is borrowed or as security for any debt, liability or obligation of the Company or of any third party.

THE SEAL

117. The Seal shall not be affixed to any instrument except by the authority of a resolution of the Directors provided always that such authority may be given prior to or after the affixing of the Seal and if given after may be in general form confirming a number of affixings of the Seal. The Seal shall be affixed in the presence of a Director or a Secretary (or an assistant Secretary) or in the presence of any one or more Persons as the Directors may appoint for the purpose and every Person as aforesaid shall sign every instrument to which the Seal is so affixed in their presence.
118. The Company may maintain a facsimile of the Seal in such countries or places as the Directors may appoint and such facsimile Seal shall not be affixed to any instrument except by the authority of a resolution of the Directors provided always that such authority may be given prior to or after the affixing of such facsimile Seal and if given after may be in general form confirming a number of affixings of such facsimile Seal. The facsimile Seal shall be affixed in the presence of such Person or Persons as the Directors shall for this purpose appoint and such Person or Persons as aforesaid shall sign every instrument to which the facsimile Seal is so affixed in their presence and such affixing of the facsimile Seal and signing as aforesaid shall have the same meaning and effect as if the Seal had been affixed in the presence of and the instrument signed by a Director or a Secretary (or an assistant Secretary) or in the presence of any one or more Persons as the Directors may appoint for the purpose.

Notwithstanding the foregoing, a Secretary or any assistant Secretary shall have the authority to affix the Seal, or the facsimile Seal, to any instrument for the purposes of attesting authenticity of the matter contained therein but which does not create any obligation binding on the Company.

DISQUALIFICATION OF DIRECTORS

119. The office of Director shall be vacated, if the Director:
- (a) committed a felony and has been adjudicated guilty by a final judgment, and the time elapsed after he has served the full term of the sentence is less than five years;
 - (b) has been sentenced to imprisonment for a term of more than one year for commitment of fraud, breach of trust or misappropriation, and the time elapsed after he has served the full term of such sentence is less than two years;
 - (c) has been adjudicated guilty by a final judgment for misappropriating company or public funds during the time of his public service, and the time elapsed after he has served the full term of such sentence is less than two years;
 - (d) becomes bankrupt or makes any arrangement or composition with his creditors;
 - (e) has been dishonored for unlawful use of credit instruments, and the term of such sanction has not expired yet;
 - (f) loses all or part of legal capacity;
 - (g) dies or is found to be or becomes of unsound mind;
 - (h) resigns his office by notice in writing to the Company;

- (i) for so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, has transferred more than one half of the Shares being held by him/it on the date of the general meeting at which his/its appointment was approved (the “**Approval Date**”); or
- (j) is removed from office pursuant to these Articles.

For so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, if the Director, after the Approval Date and before his/its commencement of the office of Director, has transferred more than one half of the Shares being held by him/it as at the Approval Date he/it was elected or had transferred more than one half of the Shares being held by him/it within relevant book close period prior to such general meeting, the election of his/its directorship shall be deemed invalid.

120. Subject to the Law and Cayman Islands law, any Shareholder(s) holding 3% or more of the total number of issued Shares for a period of one year or a longer time shall have the right to submit a petition for and on behalf of the Company against its director(s), and the Taipei District Court, ROC, may be court of the first instance for this matter. If a director has, in the course of performing his duties, committed any act resulting in material damage to the Company or in serious violation of applicable laws and/or regulations or these Articles, but has not been removed by the Company pursuant to a Supermajority Resolution vote, then, subject to the Law and Cayman Islands law, any Shareholder(s) holding 3% or more of the total number of issued Shares shall have the right, within 30 days after that general meeting, to petition any competent court for the removal of such Director, at the Company's expense. The Taipei District Court, ROC, may be court of the first instance for this matter.

PROCEEDINGS OF DIRECTORS

121. The Directors may meet together (either within or outside the Cayman Islands) for the dispatch of business, adjourn, and otherwise regulate their meetings and proceedings as they think fit. The notice for a Board meeting may be given by means of electronic communication. Questions arising at any meeting shall be decided by a majority of votes present at such meeting. In case of an equality of votes the chairman shall not have a second or casting vote. A Director may, and on the requisition of a Director shall, at any time summon a meeting of the Directors.
122. A Director may participate in any meeting of the Board of Directors, or of any committee appointed by the Board of Directors of which such Director is a member, via video conference by way of which all Persons participating in such meeting can communicate with each other and such participation shall be deemed to constitute presence in person at the meeting.
123. Subject to these Articles, the quorum necessary for the transaction of the business of the Directors shall be more than one-half of the Directors. A Director represented by an alternate Director at any meeting shall be deemed to be present for the purposes of determining whether or not a quorum is present. When the number of vacancies in the Board of Directors of the Company equals to one third of the total number of Directors, the Board of Directors shall hold, within 60 days, a general meeting of Shareholders to elect succeeding Directors to fill the vacancies.
124. A Director who is in any way, whether directly or indirectly, interested in a contract or proposed contract with the Company or in any other matters discussed at the meeting of the Directors shall declare the nature and relevant material contents of his interest at such meeting of the Directors. A Director cannot vote his own vote or on behalf of

another Director in respect of any contract or proposed contract or arrangement when he may be interested therein. The voting right of such Director who cannot vote or exercise any voting right as prescribed above shall not be counted in the number of votes of Directors present at the board meeting (but shall still be counted in the quorum for such meeting).

125. A Director who does anything for himself or on behalf of another person that is within the scope of the Company's business shall declare the essential contents of such behaviour to the general meeting of the Shareholders and be approved by a Supermajority Resolution. Failure in obtaining such approval shall cause the Director being so interested be liable to account to the Company for any profit realised by any such behaviour if the general meeting so resolves by an Ordinary Resolution within one year from such behaviour.
126. Notwithstanding the preceding Articles, a Director may hold any other office or place of profit under the Company (other than the office of auditor) in conjunction with his office of Director for such period and on such terms (as to remuneration and otherwise) as the Directors may determine and no Director or intending Director shall be disqualified by his office from contracting with the Company either with regard to his tenure of any such other office or place of profit nor shall any Director so contracting or being so interested be liable to account to the Company for any profit realised by any such contract or arrangement by reason of such Director holding that office or of the fiduciary relation thereby established.
127. Subject to these Articles, any Director may act by himself or his firm in a professional capacity for the Company, and he or his firm shall be entitled to remuneration for professional services as if he were not a Director; provided that nothing herein contained shall authorise a Director or his firm to act as auditor to the Company.
128. The Directors shall cause all minutes to be made in books or loose-leaf folders provided for the purpose of recording:
- (a) all appointments of officers made by the Directors;
 - (b) the names of the Directors present at each meeting of the Directors and of any committee of the Directors; and
 - (c) all resolutions and proceedings at all meetings of the Company, and of the Directors and of committees of Directors.
129. When the chairman of a meeting of the Directors signs the minutes of such meeting the same shall be deemed to have been duly held notwithstanding that all the Directors have not actually come together or that there may have been a technical defect in the proceedings.
130. The continuing Directors may act notwithstanding any vacancy in their body but if and for so long as their number is reduced below the number fixed by or pursuant to these Articles as the necessary quorum of Directors, the continuing Directors may act for summoning a general meeting of the Company, but for no other purpose.
131. Subject to any regulations imposed on it by the Directors, a committee appointed by the Directors may elect a chairman of its meetings. If no such chairman is elected, or if at any meeting the chairman is not present within fifteen minutes after the time appointed for holding the meeting, the committee members present may choose one of their number to be chairman of the meeting.

132. A committee appointed by the Directors may meet and adjourn as it thinks proper. Subject to any regulations imposed on it by the Directors, questions arising at any meeting shall be determined by a majority of votes of the committee members present.
133. All acts done by any meeting of the Directors or of a committee of Directors, or by any Person acting as a Director, shall notwithstanding that it be afterwards discovered that there was some defect in the appointment of any such Director or Person acting as aforesaid, or that they or any of them were disqualified, be as valid as if every such Person had been duly appointed and was qualified to be a Director.
134. The following actions require the approval of a majority of the votes of the Directors present at a Board meeting attended by at least two-thirds of all Directors:
- (a) entering into, amendment to, or termination of any contract for lease of its business in whole, or for entrusted business, or for regular joint operation with others;
 - (b) the sale or transfer of the whole or any material part of its business or assets;
 - (c) taking over the transfer of another's whole business or assets, which will have a material effect on the business operation of the Company;
 - (d) the election of Chairman of the Board pursuant to these Articles;
 - (e) issuance of corporate bonds;
 - (f) the allocation of Employees' Remunerations and Directors' Remunerations pursuant to Article 136.

DIVIDENDS AND DISTRIBUTIONS

135. Subject to any rights and restrictions for the time being attached to any Shares, the Company by Ordinary Resolution may declare dividends and other distributions on Shares in issue and authorise payment of the same out of the funds of the Company lawfully available therefor. For so long as the Shares are registered in the Emerging Market or listed on the TPEX or TSE, the Company shall not pay any dividends or bonuses if (a) it does not have earnings, or (b) it has not yet covered its losses.
136. Subject to the Law, when allocating the earnings for each fiscal year, the Company shall, after paying all or reserving such amounts for applicable taxes and offsetting losses from previous years, set aside 10% of the balance as a reserve (the "**10% Reserve**") and other special reserve or reverse special reserve pursuant to the Applicable Listing Rules, the Board of Directors may distribute the remaining earnings together with any undistributed retained earnings accrued from prior years of the Company as cash dividends and/or stock dividends to the Shareholders; provided that the dividends distributed to the Shareholders pursuant to this Article 136 shall comprise no less than 1% of the net profit after tax of the relevant fiscal year. The cash dividends shall comprise no less than []% of the total dividends declared in such year.

Subject to the Law, where the Company incurs no loss it may by a Supermajority Resolution declare dividends and/or bonuses to the Shareholders out of from the 10% Reserve, the premium paid on the issuance of any share and income from endowments received by the Company; provided that, where the cash dividends and/or stock dividends are out of from the 10% Reserve, only the portion of the 10% Reserve which exceeds 25 percent of the paid-in capital of the Company may be distributed. Subject to Article 37, the Board of Directors shall prepare the plan of distributions and submit such plan for the approval of the Shareholders at the general meeting.

Unless otherwise provided in the Applicable Listing Rules, where the Company makes profits before tax for the annual financial year, the Company shall allocate (a) no less than 0.1% of such annual profits before tax for the purpose of employees' remunerations (including employees of the Company and/or any subsidiaries of the Company) (the "**Employees' Remunerations**"); and (b) a maximum of 1% of such annual profits before tax for the purpose of Directors' remunerations (the "**Directors' Remunerations**"). Notwithstanding the foregoing paragraph, if the Company has accumulated losses of the previous years for the annual financial year, the Company shall set aside the amount of such accumulated losses prior to the allocation of Employees' Remunerations and Directors' Remunerations. Subject to the Law, the Applicable Listing Rules and notwithstanding Article 151, the Employees' Remunerations and the Directors' Remunerations may be distributed in the form of cash and/or bonus shares, upon resolution by a majority votes at a meeting of the Board of Directors attended by two-thirds or more of the Directors. The resolutions of Board of Directors regarding the distribution of the Employees' Remunerations and the Directors' Remunerations in the preceding paragraph shall be reported to the Shareholders at the general meeting after such Board resolutions are passed.

While the Company is still at the growth stage, any balance earnings together with any undistributed retained earnings accrued from prior years of the Company may be distributed as cash dividends and/or bonus shares in accordance with the Law and Applicable Listing Rules, after taking into consideration the investment environment, capital requirement, domestic and overseas competition environment and capital budget of the Company current or future, as well as shareholders interest, balance of dividend and long term financial plan of the Company.

The Company shall not be required to set aside the 10% Reserve pursuant to this Article if and when the aggregate reserves from the 10% Reserve reach 100% of the paid-in capital of the Company.

137. Any dividend may be paid by cheque sent through the post to the registered address or by remittance or otherwise to the designated account of the Shareholder or Person entitled thereto, or in the case of joint holders, to the representative of such joint holders at his registered address or to his designated account or to such Person and such address/account as the Shareholder or Person entitled, or such joint holders as the case may be, may direct. Every such cheque shall be made payable to the order of the Person to whom it is sent or to the order of such other Person as the Shareholder or Person entitled, or such joint holders as the case may be, may direct.
138. Subject to any rights and restrictions for the time being attached to any Shares, all dividends shall be declared and paid according to the number of the Shares held by the Shareholders.
139. If several Persons are registered as joint holders of any Share, any of them may give effectual receipts for any dividend or other moneys payable on or in respect of the Share.
140. No dividend shall bear interest against the Company.

ACCOUNTS, AUDIT AND ANNUAL RETURN AND DECLARATION

141. The books of account relating to the Company's affairs shall be kept in such manner as may be determined from time to time by the Directors.
142. The books of account shall be kept at the Office or at such other place or places as the Directors think fit, and shall always be open to the inspection of the Directors.

143. The Board of Directors shall prepare and submit the business report, financial statements, and surplus earning distribution or loss off-setting proposals to the annual general meeting of Shareholders for its ratification and after the meeting shall distribute to each Shareholder the copies of ratified financial statements and the resolutions on the earning distribution and/or loss offsetting and/or make them public pursuant to the Applicable Listing Rules.
144. The Board shall keep copies of the yearly business report and financial statements at the office of its Shareholders' Service Agent before ten (10) days of the annual general meeting and any of its Shareholders is entitled to inspect such documents during normal business hours of such service agent.
145. Save for the Article 144 and Article 161, the Directors shall from time to time determine whether and to what extent and at what times and places and under what conditions or regulations the accounts and books of the Company or any of them shall be open to the inspection of Shareholders not being Directors, and no Shareholder (not being a Director) shall have any right of inspecting any account or book or document of the Company except as conferred by law or authorised by the Directors or by Ordinary Resolution.
146. The accounts relating to the Company's affairs shall only be audited in such manner and with such financial year end as may be determined from time to time by the Directors, or required by the Applicable Listing Rules.
147. The Directors in each year shall prepare, or cause to be prepared, an annual return and declaration setting forth the particulars required by the Law and deliver a copy thereof to the Registrar of Companies in the Cayman Islands.

AUDIT

148. The Directors may appoint an Auditor of the Company who shall hold office until removed from office by a resolution of the Directors and may fix his remuneration.
149. Every Auditor of the Company shall have a right of access at all times to the books and accounts and vouchers of the Company and shall be entitled to require from the Directors and Officers of the Company such information and explanation as may be necessary for the performance of the duties of the auditors.
150. Auditors shall, if so required by the Directors, make a report on the accounts of the Company during their tenure of office at the next annual general meeting following their appointment, and at any time during their term of office, upon request of the Directors or any general meeting of the Members.

CAPITALISATION OF RESERVES OR PROFITS

151. Subject to the Law, the Company may, with the authority of a Supermajority Resolution:
- (a) resolve to capitalise an amount standing to the credit of reserves (including a share premium account, capital redemption reserve, special capital reserve and profit and loss account), whether or not available for distribution;
 - (b) appropriate the sum resolved to be capitalised to the Shareholders in proportion to the number of Shares held by them respectively for the purpose of the payment of bonuses in the form of Shares and apply that sum on their behalf in or towards paying up in full unissued Shares or debentures of a nominal amount equal to that sum, and allot the Shares or debentures, credited as fully paid, to the Shareholders, or partly in one way and partly in the other;

- (c) make any arrangements it thinks fit to resolve a difficulty arising in the distribution of a capitalised reserve or other funds and in particular, without limitation, where Shares or debentures become distributable in fractions the Directors may deal with the fractions as they think fit;
- (d) authorise a Person to enter (on behalf of all the Shareholders or other persons concerned) into an agreement with the Company providing for the allotment to the Shareholders or other persons respectively, credited as fully paid, of Shares or debentures to which they may be entitled on the capitalisation, and any such agreement made under this authority being effective and binding on all those Shareholders or other persons; and
- (e) generally do all acts and things required to give effect to the resolution.

152. For the avoidance of doubts, the allotment of bonus shares in connection with the Employees' Remunerations and Directors' Remunerations pursuant to Article 136 shall not require the approval of a Supermajority Resolution.

TENDER OFFER

153. Upon the receipt of the copy of a tender offer application form and relevant documents by the Company or its litigation or non-litigation agent appointed pursuant to the Applicable Listing Rules, the Board of Directors shall, subject to the Applicable Listing Rules, proceed to, including but not limited to make resolution and public announcement.

SHARE PREMIUM ACCOUNT

154. The Directors shall in accordance with the Law establish a share premium account and shall carry to the credit of such account from time to time a sum equal to the amount or value of the premium paid on the issue of any Share.

155. There shall be debited to any share premium account on the redemption or purchase of a Share the difference between the nominal value of such Share and the redemption or purchase price provided always that at the discretion of the Directors such sum may be paid out of the profits of the Company or, if permitted by the Law, out of capital.

NOTICES

156. Except as otherwise provided in these Articles, any notice or document may be served by the Company or by the Person entitled to give notice to any Shareholder either personally, or by facsimile, or by sending it through the post in a prepaid letter or via a recognised courier service, fees prepaid, addressed to such Shareholder at his address as appearing in the Register, or to the extent permitted by all applicable laws and regulations, by electronic means by transmitting it to any electronic mail number or address such Shareholder may have positively confirmed in writing for the purpose of such service of notices. In the case of joint holders of a Share, all notices shall be given to that one of the joint holders whose name stands as their representative in the Register in respect of the joint holding, and notice so given shall be sufficient notice to all the joint holders.

157. Any Shareholder present, either personally or by proxy, at any meeting of the Company shall for all purposes be deemed to have received due notice of such meeting and, where requisite, of the purposes for which such meeting was convened.

158. Any notice or other document, if served by:
- (a) post or courier, shall be deemed to have been served five days after the time when the letter containing the same is posted or delivered to the courier;
 - (b) facsimile, shall be deemed to have been served upon production by the transmitting facsimile machine of a report confirming transmission of the facsimile in full to the facsimile number of the recipient;
 - (c) recognised courier service, shall be deemed to have been served 48 hours after the time when the letter containing the same is delivered to the courier service; or
 - (d) electronic mail, shall be deemed to have been served immediately upon the time of the transmission by electronic mail.

In proving service by post or courier service it shall be sufficient to prove that the letter containing the notice or documents was properly addressed and duly posted or delivered to the courier service.

159. Any notice or document delivered or sent by post to or left at the registered address of any Shareholder in accordance with the terms of these Articles shall notwithstanding that such Shareholder be then dead or bankrupt, and whether or not the Company has notice of his death or bankruptcy, be deemed to have been duly served in respect of any Share registered in the name of such Shareholder as sole or joint holder, unless his name shall at the time of the service of the notice or document, have been removed from the Register as the holder of the Share, and such service shall for all purposes be deemed a sufficient service of such notice or document on all Persons interested (whether jointly with or as claiming through or under him) in the Share.

160. Notice of every general meeting of the Company shall be given to:

- (a) all Shareholders holding Shares with the right to receive notice and who have supplied to the Company an address for the giving of notices to them; and
- (b) every Person entitled to a Share in consequence of the death or bankruptcy of a Shareholder, who but for his death or bankruptcy would be entitled to receive notice of the meeting.

No other Person shall be entitled to receive notices of general meetings.

INFORMATION

161. The Board of Directors shall keep at the office of its Shareholders' Service Agent in Taiwan copies of these Articles, the minutes of every meeting of the Shareholders and the financial statements, the Register of Members and the counterfoil of corporate bonds issued by the Company. Any Shareholder of the Company may request, by submitting evidentiary document(s) to show his/her interests involved and indicating the scope of interested matters, an access to inspect and to make copies of the Memorandum and Articles and accounting books and records.

Without prejudice to the rights set forth in these Articles, no Shareholder shall be entitled to require discovery of any information in respect of any detail of the Company's trading or any information which is or may be in the nature of a trade secret or secret process which may relate to the conduct of the business of the Company and which in the opinion of the Board would not be in the interests of the members of the Company to communicate to the public.

162. The Board shall be entitled to release or disclose to any regulatory or judicial authority any information in its possession, custody or control regarding the Company or its affairs to any of its Shareholder including, without limitation, information contained in the Register of Members and transfer books of the Company.

INDEMNITY

163. Every Director (including for the purposes of this Article any alternate Director appointed pursuant to the provisions of these Articles) and other officer for the time being and from time to time of the Company (each an “**Indemnified Person**”) shall be indemnified and secured harmless out of the assets and funds of the Company against all actions, proceedings, costs, charges, expenses, losses, damages or liabilities incurred or sustained by such Indemnified Person, other than by reason of such Indemnified Person’s own dishonesty, wilful default or fraud, in or about the conduct of the Company’s business or affairs (including as a result of any mistake of judgment) or in the execution or discharge of his duties, powers, authorities or discretions, including without prejudice to the generality of the foregoing, any costs, expenses, losses or liabilities incurred by such Indemnified Person in defending (whether successfully or otherwise) any civil proceedings concerning the Company or its affairs in any court whether in the Cayman Islands or elsewhere.
164. The Company may purchase and maintain insurance for the benefit of the Director or the officers of the Company against any liability incurred by him/her in his/her capacity as a Director or officer, as applicable, in order to minimize the relevant indemnity liabilities incurred or sustained by the Company and the Shareholders.
165. No Indemnified Person shall be liable to the Company unless such liability arises through such Indemnified Person’s own dishonesty, wilful default or fraud.

NON-RECOGNITION OF TRUSTS

166. Subject to the proviso hereto, no Person shall be recognised by the Company as holding any Share upon any trust and the Company shall not, unless required by law, be bound by or be compelled in any way to recognise (even when having notice thereof) any equitable, contingent, future or partial interest in any Share or (except only as otherwise provided by these Articles or as the Law requires) any other right in respect of any Share except an absolute right to the entirety thereof in each Shareholder registered in the Register, provided that, notwithstanding the foregoing, the Company shall be entitled to recognise any such interests as shall be determined by the Directors in their absolute discretion.

FINANCIAL YEAR

167. Unless the Directors otherwise prescribe, the financial year of the Company shall end on December 31st in each year and shall begin on January 1st in each year.

WINDING- UP

168. If the Company shall be wound up, and the assets available for distribution amongst the Shareholders shall be insufficient to repay the whole of the share capital, such assets shall be distributed so that, as nearly as may be, the losses shall be borne by the Shareholders in proportion to the number of the Shares held by them. If in a winding up the assets available for distribution amongst the Shareholders shall be more than sufficient to repay the whole of the share capital at the commencement of the winding up, the surplus shall be distributed amongst the Shareholders in proportion to the number of the Shares held by them at the commencement of the winding up. This Article is without prejudice to the rights of the holders of Shares issued upon special terms and conditions.

If the Company shall be wound up, the liquidator may, with the sanction of an Special Resolution and any other sanction required by the Law and in compliance with the Applicable Listing Rules, divide amongst the Shareholders in specie or kind the whole or any part of the assets of the Company (whether they shall consist of property of the same kind or not) and may, for such purpose set such value as he deems fair upon any property to be divided as aforesaid and may determine how such division shall be carried out as between the Shareholders or different Classes. The liquidator may, with the like sanction, vest the whole or any part of such assets in trustees upon such trusts for the benefit of the Shareholders as the liquidator, with the like sanction shall think fit, but so that no Shareholder shall be compelled to accept any asset whereon there is any liability.

169. The Company shall keep all statements, records of account and documents for a period of ten years from the date of the completion of liquidation, and the custodian thereof shall be appointed by the liquidator or the Company by Ordinary Resolution.

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [...***...], HAS BEEN OMITTED BECAUSE ASLAN PHARMACEUTICALS PTE LTD. HAS DETERMINED THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD LIKELY CAUSE COMPETITIVE HARM TO ASLAN PHARMACEUTICALS PTE LTD. IF PUBLICLY DISCLOSED.

**LICENCE AGREEMENT
FOR VARLITINIB (ASLAN001)**

BETWEEN

ASLAN Pharmaceuticals Pte Ltd

AND

BioGenetics Co., Ltd.

Dated: 27th February 2019

THIS AGREEMENT is made on 27th February 2019

BETWEEN:-

- (1) **ASLAN PHARMACEUTICALS PTE. LTD.** (“**ASLAN**”), incorporated and registered in Singapore with company number 201007695N, having its principal offices at 83 Clemenceau Avenue, #12-03 UE Square, Singapore 239920; and
- (2) **BIOGENETICS CO., LTD.** (“**BIOGENETICS**”), a Republic of Korea corporation having its principal offices at 11th Liveplex Tower, 702 Eonju-ro, Gangnam-gu, Seoul, Republic of Korea.

WHEREAS:-

A. ASLAN owns, and has a master licence from Array BioPharma Inc. for, certain intellectual property rights and know-how with respect to that certain chemical compound designated by ASLAN as ASLAN001, and believes that ASLAN001 has the potential to become a therapeutic drug with significant commercial potential.

B. ASLAN desires to find a partner capable of realizing promptly the therapeutic and commercial potential of Products in the Territory and within the Field (terms as defined below).

C. BIOGENETICS possesses pharmaceutical development capabilities, and desires to collaborate with ASLAN to develop the therapeutic and commercial potential of Products in the Territory.

D. Now, therefore, in consideration of the premises and mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. DEFINITIONS AND INTERPRETATION

1.1. The definitions and rules of interpretation in this Section apply in this Agreement:

“**Affiliate**” shall mean, with respect to a legal entity, any corporation or other entity which directly or indirectly Controls, is Controlled by or is under common Control with, such entity.

“**Array Head Licence Agreement**” shall mean a licence agreement between ASLAN and Array BioPharma Inc. originally dated 13th July 2011 and re-entered into in amended form on 3rd January 2018 which grants exclusive worldwide rights over ASLAN001 to ASLAN.

“**ASLAN001**” shall mean the synthetic chemical entity described in Schedule 1 hereto, with the generic name of *varlitinib* and Improvements thereto made during the Term of this Agreement.

“**ASLAN In-Licensed Know-How**” means all results, data, know-how, compounds, processes, discoveries, formulations, materials, inventions, techniques or proprietary confidential information which:

- (a) are necessary for manufacturing, applying for and obtaining marketing authorisations or licences in respect of, marketing or selling Products; and
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(b) are licensed to ASLAN pursuant to the Array Head Licence Agreement in respect of which, and to the extent that, ASLAN is entitled to grant a sub-licence of such know-how.

“**ASLAN In-Licensed Patents**” means patents and patent applications listed in Schedule 2 part (i) licensed to ASLAN at the date of the Agreement pursuant to the Array Head Licence Agreement, to the extent that ASLAN is entitled to grant sub-licences of the same, and to the extent that they relate to the Commercialization of Products, to the extent that ASLAN is entitled to grant sub-licences of the same.

“**ASLAN Know-How**” shall mean all results, data, know-how, compounds, processes, discoveries, formulations, materials, inventions, techniques or proprietary confidential information which:

(a) are necessary for researching, developing, manufacturing, applying for and obtaining marketing authorisations or licences in respect of, marketing or selling Products; and

(b) are owned or Controlled by ASLAN as at the date of this Agreement.

“**ASLAN Patents**” shall mean the patents and patent applications owned or Controlled by ASLAN relating to ASLAN001 and listed in Schedule 2 parts (i) and (ii), and any other patents and patent applications relating to Products Controlled by ASLAN from time to time during the Licence Period covering the Territory.

“**Business Day**” means a day that is not a Saturday, Sunday or public holiday in Singapore or the Republic of Korea.

“**Claim**” means, in relation to a person, a demand, claim, action or proceeding made or brought by or against the person, however arising.

“**Commercialize**” means use, apply for or obtain marketing authorizations or licences, import, sell, have sold, promote, market or distribute, and, if agreed in accordance with Section 4.2, manufacture, have manufactured, make and have made; and

“Commercialization” shall be construed accordingly;

“**Commercially Reasonable Efforts**” shall mean the carrying out of obligations or tasks in a reasonable, good faith, and diligent manner consistent with efforts and resources as commonly used by a company with experience and expertise in the development and commercialization of pharmaceutical products, in such a company’s ordinary course of business, for a pharmaceutical product at a similar stage of research and development, and having similar market potential to the Product, taking into account, without limitation, issues of safety, efficacy, product profile, status of the Product, the development costs, the regulatory environment, and other scientific factors, market conditions then prevailing, including competitive environment, profitability, the competitiveness of alternative products that are or are expected to be in the relevant marketplace, and other similar factors.

“**Competing Product**” means any product which is intended to be used for the treatment of the same disease indications as Products (now or in the future) by means of an agent that directly binds to and inhibits the activity of (i) tyrosine kinase receptor or (ii) EGFR, Her-2 (ErbB-2) receptor, Her-3 (ErbB-3) receptor, Her-4 (ErbB-4) receptor and/or any heterodimer combination of the Her receptor family.

“Confidential Information” has the meaning given to it in Section 10.1.

“Control,” “Controls,” “Controlled” or “Controlling” shall mean:

- (a) in relation to a legal entity, the possession, directly or indirectly, of more than 50% of the issued shares in that entity or the power to direct, or cause the direction of, the management or policies of that entity, whether through the ownership of voting securities, by contract or otherwise; and;
- (b) in relation to Intellectual Property, possession of the ability to grant the licences or sub-licences as provided herein without violating the terms of any agreement or other arrangements with any Third Party.

“Effective Date” shall mean 27th February 2019.

“Field” shall mean all human and animal therapeutic, diagnostic and prophylactic uses.

“First Commercial Sale” means the first commercial sale of a Product in the relevant indication in the Field in the Territory by BIOGENETICS, or its Affiliates. Sales for clinical study purposes, “early access programs” or similar uses shall not constitute a First Commercial Sale. In addition, sales of a Product between BIOGENETICS and its Affiliates shall not constitute a First Commercial Sale.

“Improvement” means any improvement, development, modification or enhancement of the ASLAN Patents, the ASLAN Know-How or the Licensed Technology, whether patentable or not.

“Intellectual Property” (or **“IP”**) shall mean any patents, rights to inventions, registered designs, copyright and related rights, database rights, design rights, topography rights, trade marks, service marks, trade names and domain names, trade secrets, confidential information, rights in unpatented know-how, and any other intellectual or industrial property rights of any nature including all applications (or rights to apply) for, and renewals or extensions of such rights and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world.

“Generic Product” means with respect to the Product, a pharmaceutical product (a) containing ASLAN001 (b) that has obtained MFDS approval in the Territory solely by means of a procedure for establishing equivalence to the Product; and (c) that is legally marketed in such country by or under authority of an entity other than BIOGENETICS or its Affiliates.

“Liabilities” means Claims, losses, liabilities, costs, expenses or damage of any kind and however arising, including investigative costs, court costs, legal fees, penalties, fines and interest and amounts paid in settlement.

“Licence Period” shall mean the period commencing on the Effective Date and, unless terminated earlier pursuant to the terms of this Agreement, expiring on the tenth (10th) anniversary of the date of First Commercial Sale, subject to Section 11.2.

“**Licensed Know-How**” means the ASLAN Know-How, the ASLAN In-Licensed Know How and ASLAN’s interest in any Improvements which are not patented.

“**Licensed Patents**” means the ASLAN Patents, and the ASLAN In-Licensed Patents.

“**Licensed Technology**” shall mean the Licensed Patents and the Licensed Know-How, including any right, title and interest in any Improvements assigned to ASLAN pursuant to Section 7.11.

“**Licensing Revenue**” shall mean all gross revenue that BIOGENETICS receives from a Third Party in connection with the Commercialization of the Licensed Technology.

“**Material Safety Risk**” means, in a Party’s reasonable belief, there is an unacceptable risk a Product will cause harm in humans (according to the regulatory or ethical practices in the Territory) based upon: (i) pre-clinical safety data, including data from animal toxicology studies; or (ii) the observation of serious adverse effects in humans after that Product has been administered to or taken by humans, such as during a clinical trial or after the launch of such Product.

“**MFDS**” shall mean the Korean Ministry of Food and Drug Safety (formerly known as the Korea Food & Drug Administration).

“**Net Sales Proceeds**” shall mean in respect of direct sales to Third Parties by BIOGENETICS and its Affiliates in the Territory, the gross invoice price charged from time to time by BIOGENETICS or by its Affiliates, together with all upfront payments, milestones payments, or advances, as the case may be (referred to herein as the “**Selling Party**”), for all Products sold or supplied by the Selling Party, in arm's length sales or supplies to Third Parties less deductions allowed to the Third Party customer by the Selling Party, to the extent actually taken by the Third Party customer, on such sales for:

- trade, quantity, and cash discounts (including to wholesalers) consistent with usual industry practice in the Territory
- credits, rebates and chargebacks (including those to managed-care entities and government agencies), and allowances or credits to customers on account of rejection or returns (including, but not limited to, wholesaler and retailer returns);
- freight, postage and duties, and transportation charges specifically relating to Product, including handling and insurance thereto; and
- sales (such as VAT or its equivalent) and excise taxes, other consumption taxes, customs duties and compulsory payments to governmental authorities and any other governmental charges imposed upon the sale of such Product to Third Parties;

In the event of supplies to Third Parties for non-cash or nil consideration, the gross invoice price charged from time to time by the Selling Party shall be deemed to have been charged for such supply, and prices shall be calculated and payable on the basis set out in Section 5.

Sales among the Selling Party and its Affiliates shall be excluded from the computation of Net Sales Proceeds.

“**NHIP**” shall mean the National Health Insurance Price in the Territory for the Product as determined and approved from time to time by the relative government authorities.

“**Party**” shall mean a party to this Agreement.

“**Product**” shall mean, unless otherwise defined, any pharmaceutical or medicinal item, substance, formulation or dosage for human use containing ASLAN001 as an active ingredient.

“Regulatory Filings” means, with respect to Products, any submission to MFDS or any other regulatory body in the Territory with authority to grant marketing approvals for Products, of any regulatory application together with any material related correspondence and documentation and shall include, without limitation, any submission to a regulatory advisory board, marketing authorization application and any supplement or amendment thereto. For the avoidance of doubt, Regulatory Filings shall include any IND, MAA or the equivalent in the Territory.

“Territory” shall mean the Republic of Korea.

“Third Party” shall mean any entity other than ASLAN, BIOGENETICS or any Affiliate of ASLAN or BIOGENETICS.

- 1.2. Section, Schedule and paragraph headings shall not affect the interpretation of this Agreement.
- 1.3. The Schedules form part of this Agreement and shall have effect as if set out in full in the body of this agreement and any reference to this Agreement includes the Schedules.
- 1.4. Unless the context otherwise requires, words in the singular include the plural and in the plural include the singular.
- 1.5. Unless the context otherwise requires, a reference to one gender shall include a reference to the other genders.
- 1.6. Writing or written includes faxes.
- 1.7. Any words following the terms ‘including’, ‘include’, ‘in particular’ or any similar expression shall be construed as illustrative and shall not limit the sense of the words preceding those terms.
- 1.8. A “person” includes a natural person, corporate or unincorporated body (whether or not having separate legal personality), partnership, joint venture and a government or statutory body or authority.
- 1.9. If a word is defined or phrase is defined, its other grammatical forms have the corresponding meaning.
- 1.10. No rule of construction will apply to a provision to the disadvantage of a Party merely because that Party proposed the provision or would otherwise benefit from it.

2. LICENCE GRANT

- 2.1. Subject to the terms of this Agreement, ASLAN hereby grants to BIOGENETICS an exclusive, even as to ASLAN, license under ASLAN’s rights in the Licensed Technology to Commercialize and, if agreed in accordance with Section 4.2, manufacture Products in the Territory in the Field. To make it clear, ASLAN shall not distribute the Products nor grant to Third Party any license to Commercialize the Products in the Territory during the Licence Period of this Agreement.
 - 2.2. All rights granted in this Agreement by ASLAN to BIOGENETICS shall be exercised in the Territory, during the Licence Period and in accordance with the terms and conditions set out in this Agreement.
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- 2.3. For the avoidance of doubt, ASLAN shall retain all rights to the Licensed Technology other than the commercial and (subject to Section 4.2) manufacturing rights granted to BIOGENETICS under Section 2.1.
- 2.4. During the Licence Period and for one (1) year thereafter, neither BIOGENETICS, nor any of its Affiliates, will conduct, participate in, or fund, directly or indirectly, either alone or with a Third Party, the development, manufacture or commercialization of a Competing Product, or conduct a drug discovery or other research program the goal of which is to identify Competing Products (“**Competing Products Development**”); provided however, BIOGENETICS may participate in the Competing Products Development during the Licence Period with the prior written approval of ASLAN.
- 2.5. None of the rights under this Agreement may be sub-licensed or sub- contracted by BIOGENETICS unless ASLAN’s prior written consent has been obtained; provided however, either Party may assign, transfer, sub-license or sub-contract to any of its Affiliates.

3. **DILIGENCE**

- 3.1. BIOGENETICS and/or its Affiliates shall use Commercially Reasonable Efforts to (i) obtain marketing approvals for Products in the Territory, and (ii) Commercialize Products in the Territory after receipt of such marketing approvals.
 - 3.2. BIOGENETICS’s activities under Section 3.1 shall be performed by BIOGENETICS at its sole risk and responsibility, cost and expense, and in compliance with all applicable laws and regulatory requirements, including without limitation GCP, GLP and GMP. Therefore, BIOGENETICS assumes full responsibility for any loss or damage derived from the conduct and performance of this Agreement and shall be responsible for any such Claims resulting from such activities except to the extent that such loss or damage arises out of or results from, directly or indirectly, breach of any term of this Agreement, negligence, or wilful misconduct of ASLAN.
 - 3.3. **Information and Reports.** BIOGENETICS shall keep ASLAN informed regarding the ongoing Commercialization of Products through reasonably detailed reports to be provided to ASLAN on a semi-annual basis, together with, if requested by ASLAN, face to face meetings or telephone conferences to discuss the same during ordinary business hours of BIOGENETICS. Such semi-annual reports shall include summaries of all material activities (including regulatory activities) and results with respect to the Products in the Territory. ASLAN shall keep BIOGENETICS informed regarding the ongoing development status of Products including but not limited to any clinical trial studies, registration status and price information in other countries except for the Territory through reasonably detailed reports to be provided to BIOGENETICS on a semi-annual basis, together with, if requested by BIOGENETICS, face to face meetings or telephone conferences to discuss the same during ordinary business hours of ASLAN. Notwithstanding the foregoing, and for the purposes of Section 5.2:
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- (a) ASLAN shall promptly (and in any event within 30 days) inform BIOGENETICS of the occurrence of FDA approval for the first indication for a Product; and
- (b) BIOGENETICS shall promptly (and in any event within 30 days) inform ASLAN of the occurrence of the other events relating to Products triggering milestone payments set out in Section 5.2.

3.4. **Responsibility for regulatory interactions.** BIOGENETICS shall be responsible for the preparation and filing of any and all Regulatory Filings. ASLAN shall use Commercially Reasonable Efforts to provide BIOGENETICS with appropriate documents and data required, and general cooperation, to enable the dossiers and other documentation required for MFDS submissions and other Regulatory Filings to be completed. All such Regulatory Filings will be filed in BIOGENETICS' name and/or on its behalf. BIOGENETICS shall promptly notify ASLAN of all Regulatory Filings submitted or received by BIOGENETICS or its Affiliates with respect to Products, and upon ASLAN's request, shall provide to ASLAN one paper copy or electronic file of all such regulatory Filings. Additionally, BIOGENETICS will upon ASLAN's request, to the extent reasonably required to confirm BIOGENETICS' compliance with its obligations hereunder, provide ASLAN with reasonable additional information and data generated by or on behalf of BIOGENETICS in such semi-annual period, it being understood that ASLAN shall keep such information and data in strict confidence. Notwithstanding the foregoing, prior to any application for determination of NHIP for Products, BIOGENETICS and ASLAN shall discuss the range of target pricing to seek in such application, including a lowest acceptable price, and ASLAN's prior approval (not to be unreasonably withheld or delayed) shall be obtained before such application is made. Any formal acceptance by BIOGENETICS of a NHIP price proposed by the relative government authorities which is lower than the lowest acceptable price agreed with ASLAN beforehand, shall require prior discussion with ASLAN and ASLAN's prior approval, which shall not be unreasonably withheld or delayed.

3.5. The Parties shall establish procedures for the exchange and reporting of all adverse events related to the Product, which shall be governed by a Pharmacovigilance & Safety Exchange Agreement, to be entered into in due course.

4. **MANUFACTURE & SUPPLY**

4.1 ASLAN agrees to provide clinical drug supplies to BIOGENETICS required for Regulatory Filings by or on behalf of BIOGENETICS and for Commercialisation of Products, pursuant to a separate manufacturing and supply agreement to be negotiated in good faith by the Parties and which the Parties shall use Commercially Reasonable Efforts to enter into no later than 30th June 2020.

4.2 Notwithstanding the foregoing, that if BIOGENETICS wishes to manufacture by itself or have manufactured by a third party the Products during the Licence Period under this Agreement, ASLAN agrees to engage in good faith discussions, using Commercially Reasonable Efforts, to negotiate and execute a manufacturing licence conferring such rights on BIOGENETICS.

5. **PAYMENTS TO ASLAN**

- 5.1 **Initial Payment.** In consideration of the licenses and rights granted to BIOGENETICS hereunder, BIOGENETICS shall pay to ASLAN an initial payment of two million USD (US \$2,000,000) (“**the Initial Payment**”), to be paid no later than fifteen (15) days of ASLAN’s invoice for the same, which may be issued to BIOGENETICS any time from mutual signature of this Agreement. The Initial Payment shall consist of (i) an upfront licence fee component, and (b) a reimbursement component, to cover ASLAN’s costs associated with the development of the Product in the Territory up to the Effective Date. The Parties shall work in good faith to agree the relative allocation of the different components of the Initial Payment in writing as soon as possible after the Effective Date [and in any event no later than 31st March 2019]. The Parties acknowledge that BIOGENETICS may be required to pay Korean withholding tax (“**WHT**”) at a rate of [...***...] percent ([...***...] %) on all or part of the Initial Payment, depending on the agreed allocation and the WHT treatment in Korea of the different components, but that as of the Effective Date this issue has not been finally determined between the Parties. Accordingly BIOGENETICS shall be entitled to retain fifty per cent (50%) of the estimated maximum potential WHT charge on the Initial Payment, that is, the sum of [...***...] USD (\$[...***...]) (“**the WHT Retention**”) to cover potential WHT liability. If a suitably qualified tax expert agreeable to both Parties determines that a sum exceeding the WHT Retention is required to be paid by BIOGENETICS to the Korean National Tax Service (the “**WHT Balance**”), then ASLAN undertakes, upon BIOGENETICS’s request, to remit the whole of the WHT Balance to BIOGENETICS no later than 5th April 2019. On the other hand, if a suitably qualified tax expert agreeable to both Parties determines that a sum less than the WHT Retention is required to be paid by BIOGENETICS to the Korean National Tax Service, then BIOGENETICS undertakes, upon ASLAN’s request, to remit to ASLAN, no later than 5th April 2019, the whole or whatever portion of the WHT Retention is not required to be paid to the Korean National Tax Service.
- 5.2 **Development Milestones.** Upon achieving certain development milestones as set out below, BIOGENETICS will make one-time milestone payments to ASLAN:

Event	Payment
First indication - FDA approval:	USD\$[...***...] ([...***...] dollars)
First indication - MFDS approval:	USD\$[...***...] ([...***...] dollars)
First indication - NHIP price listing in the Territory:	USD\$[...***...] ([...***...] dollars)
Second indication - First Commercial Sale	USD\$[...***...] ([...***...] dollars)
Third indication - First Commercial Sale	USD\$[...***...] ([...***...] dollars)

The provisions of Section 6 shall apply in respect of ASLAN’s obligation to keep records and accounts in respect of ASLAN001 development costs and BIOGENETICS’s right of audit, *mutatis mutandis*.

5.3 **Sales Milestones.** Upon achieving certain sales milestones as set out below, BIOGENETICS will make one-time milestone payments to ASLAN:

Event	Payment
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$[...***...] ([...***...] dollars)
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$[...***...] ([...***...] dollars)
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$[...***...] ([...***...] dollars)
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$[...***...] ([...***...] dollars)
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$[...***...] ([...***...] dollars)
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$[...***...] ([...***...] dollars)

Where the Product is approved in different indications, Net Sales for the different indications for that drug shall be aggregated for the purposes of calculating whether Net Sales during any calendar year have reached milestones as set out above.

5.3A **Royalties.** Royalties shall be paid by BIOGENETICS to ASLAN in accordance with this Section 5.3 on Net Sales of the Products in the Territory in the Field, as follows:

For Net Sales up to the equivalent of US\$[...***...] ([...***...] US dollars) during any particular calendar year:	[...***...]% ([...***...] percent) on Net Sales
For Net Sales above the equivalent of US\$[...***...] ([...***...] US dollars) and up to US\$[...***...] ([...***...] US dollars) during any particular calendar year	[...***...]% ([...***...] percent) on Net Sales
For Net Sales above the equivalent of US\$[...***...] ([...***...] US dollars) during any particular calendar year	[...***...]% ([...***...] percent) on Net Sales

5.4 Payments to ASLAN shall be on a quarterly basis and in US dollars and shall be made within thirty (30) days following the applicable calendar quarter.

5.5 **Taxes.** BIOGENETICS agrees to pay to ASLAN the full amount of all payments stated in this Agreement without deductions, subject to compliance with applicable laws. For the avoidance of doubt, ASLAN shall bear ultimate liability for any tax or duties arising as a result of such payments (whether in Singapore, the Territory or otherwise). In the event that BIOGENETICS is required to withhold any taxes on amounts payable to ASLAN in accordance with applicable

laws, each Party agrees to provide the other with reasonable assistance including provision of any tax forms, evidence of taxes withheld and such other information as may be reasonably necessary in order for the paying Party not to withhold tax, to withhold tax at a reduced rate under an applicable bilateral income tax treaty or for ASLAN to reclaim withheld tax.

- 5.6 **Statement.** At the time of each quarterly payment in accordance with Section 5.4, BIOGENETICS shall provide ASLAN with a statement specifying:
- 5.6.1 the nature of and amount of the payment received that contributes to Licensing Revenue (including copies of any notifications, reports or statements from any Third Party relating to the contribution);
 - 5.6.2 the calculation of Licensing Revenue based on such payment including details and amount of any deductions made in calculating such revenue;
 - 5.6.3 details of any exchange rates used to convert any currencies;
 - 5.6.4 details of the Net Sales for the period of the statement; and
 - 5.6.5 a statement of the amount of payment due to ASLAN in respect of such Licensing Revenue;
 - 5.6.6 upon receipt of such statement, ASLAN may issue an invoice to BIOGENETICS for such amount. Within 30 days of receipt of such invoice, BIOGENETICS must remit payment to ASLAN to a bank account nominated by ASLAN
 - 5.6.7 in respect of the fourth quarter of each calendar year, where there has been over- or under-payment to ASLAN over the previous calendar year based on the rates applicable for Net Sales in each calendar year, an explanation of any relevant adjustments (up or down) in the payment for that fourth quarter.
- 5.7 **Royalty Term.** Royalties payable under this Section 5 shall be paid on a Product-by-Product basis with respect to Net Sales made during the Licence Period.
- 5.8 **Generics.** From the time that the Licensed Patents have expired and one or more Third Parties is selling a Generic Product in the Territory, then as from the next quarter year the royalty applicable under Section 5.3 shall be discounted by [...***...] per cent ([...***...]) %.
- 5.9 **Interest.** Where ASLAN does not receive payment of any sum required on or before the day on which such payment is due, BIOGENETICS shall pay ASLAN interest on the past due amount as follows: interest shall accrue thereafter on the sum due and owing to ASLAN at the lesser of seven percent (7%) over the LIBOR rate for a three month deposit in US dollars on the last Business Day of the previous calendar month, or the maximum amount allowed by law, with interest to accrue on a day to day basis without prejudice to ASLAN's right to receive payment on the due date.
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5.10 **Economic Viability.** If any of the following apply:

- (a) sales of Generic Products in the Territory result in an erosion of 60% or more of the price of Products in the Territory from the price at First Commercial Sale;
- (b) fluctuations in the exchange rate between the South Korean won and US dollar for a continuous period of more than two (2) months, resulting in a differential of higher than twenty per cent (20%) in comparison to the exchange rate in force on the date of signature of this Agreement; or
- (c) the official Korean reimbursement price for a Product as determined from time to time by the respective governmental authority shows dramatic change (that is to say, at the end of any two month period there has been a more than 10% aggregate increase or decrease),

the Parties shall meet together either face to face or by telephone conference to discuss how to proceed, including without limitation adjusting NHIP with the consent of both Parties..

5.11 **Array Head Licence Agreement.** BIOGENETICS will take all reasonable steps to assist ASLAN in ensuring that it complies with its obligations under the Array Head Licence Agreement.

6. RECORDS AND ACCOUNTS

- 6.1. BIOGENETICS must keep complete and accurate records of all matters connected with the Commercialization of Products and must also keep proper accounts in relation to Licensing Revenue and other payments payable to ASLAN under this Agreement containing all data necessary for the calculation of the amounts payable to ASLAN pursuant to this Agreement. BIOGENETICS must keep those records and books of account for five (5) years following the end of the year to which they relate.
 - 6.2. Not more than once in any twelve (12) month period, BIOGENETICS must permit during business hours an independent accountant nominated by ASLAN to inspect the records and accounts maintained under Section 6.1 for the purpose of verifying their accuracy with a prior notice of ten (10) Business Days, and confirming whether all payments payable to ASLAN under this Agreement have been properly calculated and paid by BIOGENETICS.
 - 6.3. BIOGENETICS must provide to the accountant such assistance as is reasonably required by that person in order to verify the accuracy of those records and accounts and confirm whether all payments payable to ASLAN under this Agreement have been properly calculated and paid by BIOGENETICS.
 - 6.4. If ASLAN's inspection reveals that any monies are outstanding then BIOGENETICS must, within 30 days after receiving notice of the amount due, pay ASLAN the outstanding amount. If the inspection reveals there was an overpayment then the amount of the overpayment may be credited against future payments due to ASLAN under this Agreement.
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- 6.5. ASLAN shall bear the cost of the independent accountant appointed under this Section 6 except if the inspection reveals that any monies are outstanding by more than 5%, in which case BIOGENETICS must pay ASLAN's reasonable inspection costs.

7. INTELLECTUAL PROPERTY

Patent Prosecution

- 7.1. ASLAN shall have the right to control the preparation, filing, prosecution and maintenance of all the ASLAN Patents. ASLAN shall give BIOGENETICS an opportunity to review and comment on the text of each patent application for the Territory within the ASLAN Patents, as well as any other material submissions related to the ASLAN Patents in the Territory before filing, and shall supply BIOGENETICS with a copy of such patent application as filed, together with notice of its filing date and serial number. BIOGENETICS has a right to make reasonable recommendations in relation to the filing, prosecution, maintenance, enforcement and defence of the ASLAN Patents in the Territory and ASLAN shall accept BIOGENETICS' recommendations, in good faith, unless such recommendations would adversely affect the ASLAN Patents in the Territory.
- 7.2. BIOGENETICS shall reimburse ASLAN for the amounts paid to Third Parties by ASLAN in connection with the filing, prosecution and maintenance of the ASLAN Patents in the Territory as from the Effective Date, including without limitation, amounts paid by ASLAN as filing and maintenance fees, translation fees and amounts paid to outside patent counsel and foreign associates ("**Patent Costs**"). ASLAN shall provide BIOGENETICS with an invoice for Patent Costs on a monthly basis, and payment shall be due within thirty (30) days thereafter.
- 7.3. If ASLAN, in its sole discretion, which discretion shall not be exercised unreasonably, decides to abandon the preparation, filing, prosecution or maintenance of any patent or patent application in the ASLAN Patents in the Territory, then ASLAN shall notify BIOGENETICS in writing thereof at least ninety(90) days prior to any due date that requires action to avoid loss of rights in connection with the applicable patent and/or patent application, and following the date of such notice BIOGENETICS shall have the right, at its cost, to prosecute and maintain such patents and patent applications in ASLAN's name, provided that BIOGENETICS shall give ASLAN an opportunity to review and comment on the text of each patent application or other material submissions related to the ASLAN Patents before filing, and shall supply ASLAN with a copy of such patent application as filed, together with notice of its filing date and serial number.

Enforcement

- 7.4. In the event that either Party becomes aware of actual or threatened infringement of any ASLAN Patents in the Territory by the manufacture or sale or use of a Product or competing product in the Field ("**Infringing Product**"), it shall provide the other Party with the available evidence, if any, of such infringement.
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- 7.5. ASLAN, at its sole expense, shall have the initial right to initiate and control any enforcement of the ASLAN Patents in the Territory with respect to an Infringing Product or to defend any declaratory judgments seeking to invalidate or hold the ASLAN Patents unenforceable (each, an “**Enforcement Action**”), in each case in ASLAN’s own name and, if necessary for standing purposes, in the name of BIOGENETICS or its nominee and shall protect, in good faith, the interests of BIOGENETICS in taking such enforcement action. If ASLAN does not, within one hundred twenty (120) days of receipt of notice from BIOGENETICS, take significant steps to abate the infringement or file suit to enforce the ASLAN Patents against at least one infringing party in the Territory, BIOGENETICS shall have the right to take whatever action it deems appropriate, acting in good faith and reasonably, to enforce the ASLAN Patents. To make it clear of the responsibilities on the costs and expenses for the afore-mentioned enforcement action taken by BIOGENETICS, ASLAN shall fully reimburse the reasonable costs and expenses incurred to BIOGENETICS unless BIOGENETICS has breached the terms and conditions of this Agreement. The Party controlling any such enforcement action shall not settle the action or otherwise consent to an adverse judgment in such action that diminishes the rights or interests of the non-controlling Party (including in the case of BIOGENETICS, entering into any settlement admitting the invalidity of, or otherwise impairing, the ASLAN Patents) without the prior written consent of the other Party. All monies recovered upon the final judgment or settlement of any such suit to enforce the ASLAN Patents shall be shared, after reimbursement of expenses, as follows: (i) in the event that ASLAN brought the claim, suit or action, any remaining amount shall be shared eighty percent (80%) to ASLAN, 20% to BIOGENETICS , and (ii) in the event that BIOGENETICS brought the claim, suit or action, any remaining amount shall be retained by BIOGENETICS.
- 7.6. In any suit to enforce and/or defend the ASLAN Patents pursuant to this Section 7, the Party not in control of such suit (a) shall, at the request and expense of the controlling Party, (b) reasonably cooperate and, to the extent possible, have its employees testify when requested and make available relevant records, papers, information, samples, specimens, and the like, and (c) further agrees to be named in and consents to join in any suit, action, or proceeding as a party to the suit, action, or proceeding to the extent necessary to establish standing in the suit, action, or proceeding.
- 7.7. If a Third Party asserts that a patent or other right owned by it is infringed by the manufacture, use, marketing, sale or importation of any Product, the Party becoming aware of such a matter shall immediately notify the other of it. ASLAN shall have the right to initiate, prosecute, defend and control legal action (whether by suit, proceedings, counter-claim, oppositions, customs procedure or otherwise) in respect of any such assertion. BIOGENETICS shall have the right actively to co-operate and join with ASLAN in any legal action if (acting in good faith and reasonably) it considers it necessary or desirable, and ASLAN shall have the right to have BIOGENETICS and/or its nominee joined as a passive party to any legal action if necessary, and in either circumstance each party shall reasonably co-operate with the other in regard to the same. All costs and expenses (including attorneys' fees) of any legal action brought in accordance with this Section 7.7 shall be borne by ASLAN, provided that where ASLAN is bearing BIOGENETICS’s costs and expenses (including attorneys' fees) if BIOGENETICS actively elects to be joined as a party to such action (as above), these shall be reasonable. Any monetary recovery in connection with legal action shall be applied first to reimburse ASLAN for its out-of-pocket costs and
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expenses (including management time and reasonable attorneys' fees) incurred in connection with any legal action. The remainder shall be split between the Parties in proportion to the relative degree of their active involvement in connection with the action, but if the Parties, acting in good faith, cannot agree such relative proportions, then on the basis of 50% to BIOGENETICS and 50% to ASLAN.

- 7.8. **Patent Marking.** BIOGENETICS agrees to mark and have its Affiliates mark all patented Products they sell or distribute pursuant to this Agreement in accordance with the applicable patent statutes or regulations in the Territory.
- 7.9. **Patent Term Extensions.** The Parties will reasonably discuss patent term adjustment, patent term extension, supplemental patent protection or related extension of rights with respect to ASLAN Patents in the Territory. To the extent permitted by applicable law, ASLAN shall apply for and pursue any such adjustment, extension or protection as directed by BIOGENETICS, at BIOGENETICS' cost.
- 7.10. **Improvements by ASLAN.** If any Improvements are made by ASLAN or its Third Party collaborators during the Licence Period, the Parties acknowledge that ASLAN will own such Improvements and the Intellectual Property therein. ASLAN will promptly disclose such Improvements to BIOGENETICS and they will form part of the Licensed Technology licensed hereunder.
- 7.11. **Improvements by BIOGENETICS.** All rights, title and interest in any Improvements made by or on behalf of BIOGENETICS or its Affiliates during the Licence Period shall be owned by ASLAN; and BIOGENETICS hereby assigns all of its rights, title and interest in and to such Improvements to ASLAN and agrees to do all such other acts as appropriate to allow ASLAN to perfect such rights, title and interest. BIOGENETICS will promptly disclose such BIOGENETICS Improvements to ASLAN if they are necessary or useful to the development or Commercialization of Products.

8. WARRANTIES

- 8.1. Each of the Parties warrants that:
 - 8.1.1 it has full power and authority to enter into and observe the obligations under this Agreement and, for the avoidance of doubt ASLAN warrants that the Licensed Patents and the Licensed Know-how are either owned or Controlled by it;
 - 8.1.2 to the best of its actual knowledge as at the Effective Date, its entry into and performance under the terms of this Agreement will not infringe the rights of any Third Party or cause it to be in breach of any obligations to a Third Party;
 - 8.1.3 all information, data and materials provided by it to the other pursuant to this Agreement will be, to the best of its knowledge and belief, accurate and complete in all material respects.
 - 8.2. ASLAN warrants that, to the best of its actual knowledge as at the Effective Date:
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- 8.2.1 the exercise by BIOGENETICS of the licence rights granted to BIOGENETICS under Section 2 does not infringe the rights of any Third Party and any terms and conditions of Array Head Licence Agreement;
- 8.2.2 no Third Party has threatened or, so far as it is aware, is currently threatening proceedings in respect of infringement of any the Licensed Patents and the Licensed Know-how, and none of the same is the subject of any actual or, so far as it is aware, threatened challenge, opposition or revocation proceedings.
- 8.3. Any condition, warranty or other term which is not expressly set out in this Agreement which might otherwise be implied or incorporated into this Agreement, whether by statute, common law or otherwise, is, insofar as it is lawful to do so, hereby excluded.
- 8.4. **Compliance with Law.** Each Party covenants to the other that it will comply with all applicable laws as amended, in carrying out its obligations pursuant to this Agreement. Each Party covenants to the other that it and any sub-contractor legitimately appointed by it currently holds or at the relevant time will hold any and all consents, approvals, orders or authorizations necessary to comply with its obligations under this Agreement.
- 8.5. **Disclaimers.** Without prejudice to ASLAN's warranties set out in Sections 8.1 and 8.2, BIOGENETICS acknowledges that ASLAN licences the Licensed Technology "as is", that is, without any warranty of any kind, express or implied, including, without limitation, warranty of its accuracy or completeness, of merchantability, fitness for a particular purpose (including but not limited to manufacture the Product or conduct the development), commercial value, and without any warranty of any kind, express or implied, of the inexistence of adverse effects, of the safety or other quality, efficiency, stability, characteristics or usefulness of, or merchantability, or fitness for a particular purpose of any Product.

9. LIABILITY

- 9.1. **BIOGENETICS Indemnities.** BIOGENETICS shall indemnify, keep indemnified and hold harmless ASLAN, its Affiliates and their directors, officers and employees ("**ASLAN Indemnitees**") from and against all Liabilities incurred in connection with any Third Party claim arising out of or resulting from:
- 9.1.1 breach of any term of this Agreement by BIOGENETICS, or its Affiliates, contractors or sub-licensees;
- 9.1.2 the negligence, recklessness or wilful misconduct of BIOGENETICS, its Affiliates or its contractors or sub-licensees;
- 9.1.3 the Commercialization of Products by BIOGENETICS or its Affiliates, sub-licensees or contractors or any end-use of such Products in a manner and for a purpose authorised by any of them,

except to the extent that the Liabilities arise out of or result from, directly or indirectly, breach of any term of this Agreement, negligence, or wilful misconduct of any ASLAN Indemnitees.

- 9.2. **ASLAN Indemnities.** ASLAN shall indemnify, keep indemnified and hold harmless BIOGENETICS and its Affiliates, directors, officers and employees (“**BIOGENETICS Indemnitees**”) from and against all Liabilities incurred in connection with any Third Party claim arising out of or resulting from:
- 9.2.1 breach of any term of this Agreement by ASLAN, or its Affiliates, contractors or sub-licensees;
 - 9.2.2 the negligence, recklessness or wilful misconduct of ASLAN or its Affiliates or contractors in the performance of its obligations under this Agreement,
- except to the extent that the Liabilities arise out of or result from, directly or indirectly, breach of any term of this Agreement, negligence, or wilful misconduct of any BIOGENETICS Indemnitees.
- 9.3. It is a condition of indemnification under this Agreement that:
- 9.3.1 the indemnified Party gives written notice to the indemnifying Party of the Claim in respect of which indemnification is sought promptly on becoming aware of it and does not at any time admit liability or otherwise attempt to settle or compromise such Claim without the indemnifying Party’s prior written consent;
 - 9.3.2 the indemnifying Party shall, at its cost, have sole conduct of the defence or compromise of any such Claim and as between the indemnifying Party and the indemnified Party shall have the sole right to any costs and damages awarded as a result of any such Claim; and
 - 9.3.3 the indemnified Party provides the indemnifying Party such assistance and co-operation as it shall reasonably require, at the indemnifying Party’s reasonable cost, in respect of the conduct of such defence or compromise.
- 9.4. **Insurance.** During the Licence Period, each Party, at its own expense, shall maintain product liability and other appropriate insurance or self-insure in an amount consistent with industry standards to a reasonably adequate level, and upon request each Party shall provide proof of such coverage to the other Party.
- 9.5. **Excluded Liabilities.** Subject to this Section 9.5, the Parties agree that with respect to any claim by one Party against the other arising out of the performance or failure of performance of the other Party under this Agreement, a Party shall be liable to the other Party for direct damages only and shall not be liable for any indirect or consequential loss or damage whatsoever arising under or in relation to the Agreement whether arising from breach of contract (including under any indemnity), misrepresentation (whether tortious or statutory), tort (including negligence), breach of statutory duty, strict liability including but not limited to loss of profits, loss of business, loss of goodwill or similar loss, regardless of whether arising from warranty, strict liability or otherwise or any other legal theory howsoever
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arising, even if that Party was aware of the possibility that such loss or damage might be incurred by the other, except as a result of a Party's wilful misconduct. Nothing in this Section 9.5 is intended to limit or restrict the rights or obligations of either Party under Section 8 [Warranties] or to limit a Party's liability in respect of wilful misconduct.

10. CONFIDENTIALITY

10.1. **Confidentiality; Exceptions.** In this Agreement, "Confidential Information" means any information and materials disclosed or made available to one Party by or on behalf of the other Party in connection with this Agreement, whether disclosed in writing, orally or by any other means and regardless of the date it was disclosed, except to the extent that it can be established by the receiving Party that such Confidential Information:

- 10.1.1 is in the lawful knowledge or possession of the receiving Party prior to the time it was disclosed to, or learned by, the receiving Party;
- 10.1.2 is developed independently by the receiving Party by an employee with no knowledge of the disclosure;
- 10.1.3 was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving Party;
- 10.1.4 became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving Party in breach of this Agreement; or
- 10.1.5 is disclosed to the receiving Party, other than under an obligation of confidentiality, by a Third Party who has the lawful power to disclose such information to the receiving Party.

Confidential Information shall be deemed to include the terms of this Agreement.

10.2. **Authorized Use and Disclosure.** Except as expressly provided otherwise in this Agreement or on receiving the prior written consent of the other Party, each Party:

- 10.2.1 must keep the Confidential Information of the other Party confidential;
 - 10.2.2 must not use any Confidential Information of the other Party except as reasonably necessary in carrying out its obligations, or exercising its rights, under this Agreement ("**Permitted Purpose**");
 - 10.2.3 may only disclose any Confidential Information of the other Party as follows:
 - (i) to its Affiliates, directors, employees, permitted sub-licensees, consultants and advisors (and the directors, employees, consultants and advisors of its Affiliates) ("**Representatives**") to the extent necessary for the Permitted Purpose provided that the Party must ensure that any such Representative complies with the obligations of confidence and non-use set out in this Agreement;
 - (ii) the terms of this Agreement may be disclosed to its legal and financial advisors, who must be bound by similar obligations of confidentiality as contained in this Agreement;
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- (iii) if required to be disclosed to a competent authority in accordance with applicable laws, regulations or stock exchange rules (as applicable), in which case the disclosing Party shall promptly notify the other Party of such disclosure requirement to enable the other Party to seek a protective order or other form of confidential treatment for the Confidential Information, and shall thereafter disclose only that portion of the Confidential Information which is required to be disclosed in order to comply;
- (iv) with ASLAN's prior written consent (not to be unreasonably withheld), BIOGENETICS may disclose ASLAN's Confidential Information to potential investors, or acquirers, on a need to know basis, and who must be bound by similar obligations of confidentiality as contained in this Agreement;
- (v) BIOGENETICS may disclose IP of ASLAN to the extent such disclosure is reasonably necessary in prosecuting or defending litigation,, or conducting preclinical or clinical trials.

10.3. **Term of confidentiality.** The obligations of confidentiality set out in this Section 10 apply from the Effective Date until five (5) years after the expiration or termination of this Agreement.

10.4. **Specific enforcement.** Each Party acknowledges that:

10.4.1 the value of the other Party's Confidential Information, which includes any jointly owned Confidential Information, is unique and difficult to assess in monetary terms;

10.4.2 a breach by it of any of its obligations of confidentiality under this Agreement may irreparably harm the Party disclosing such Confidential Information, and damages may not be an adequate remedy for any such breach; and

10.4.3 therefore, if it actually breaches or threatens to breach the confidentiality obligations set forth in this Agreement, the Party whose Confidential Information is the subject of such breach, or who is affected by such breach, may seek to enforce this Agreement by way of injunctive relief or specific performance as a remedy (in addition to any other available relief) without proof of actual or special damage.

10.5. **Publications.** ASLAN and BIOGENETICS agree not to issue any press releases or public announcements concerning the terms of this Agreement if the other Party (or its Affiliates or products) is named therein (directly or by referencing items such as logotypes, corporate image, commercial brands, or trademarks) or such release or announcement discloses Confidential Information of the other Party or discloses information which will or may (assessed reasonably) cause harm to the commercial value or reputation of the other's products containing the Compound (and to ensure that their respective Affiliates do not do so) without the prior written consent of the other Party, subject to Section 10.2.3 (iii). The Party interested in issuing the publication shall submit the proposal to the other Party, who shall have at least seven (7) Business Days for

review, except as required by a governmental authority and applicable Law, including disclosure required by any securities exchange; provided that following agreement upon the content of such disclosure, subsequent releases which do not materially depart from such agreed content may be made without prior written consent from the other Party.

11. TERM AND TERMINATION

- 11.1. **Term.** This Agreement shall become effective as of the Effective Date and, unless earlier terminated under this Agreement, shall continue in full force and effect until the expiry of the Licence Period, subject to Section 11.2.
 - 11.2. **Automatic Renewal For One Further Year.** If either Party wishes this Agreement to expire without automatic renewal for a further year, then it must serve notice on the other to that effect at least ninety (90) days before expiry of the Licence Period. In the absence of such notice, then this Agreement shall automatically renew for one (1) further year at which point it shall definitively expire unless the Parties mutually agree in writing otherwise.
 - 11.3. **Termination For Breach.** Either Party may terminate this Agreement in the event the other Party shall have breached or defaulted in the performance of any of its material obligations hereunder, and such default shall have continued for ninety (90) days after written notice thereof was provided to the breaching Party by the non-breaching Party. Any termination shall become effective at the end of such ninety (90) day period unless the breaching Party (or any other Party on its behalf) has cured any such breach or default prior to the expiration of the ninety (90) day period.
 - 11.4. **Termination For Material Safety Risk.** Either Party may terminate the Agreement at any time in the event of a Material Safety Risk associated with the Product.
 - 11.5. **Termination on Insolvency.** Either Party may terminate this Agreement by notice, if, at any time, the other Party (i) suspends payment of its debts or is unable to pay its debts as they fall due or admits inability to pay its debts or is deemed unable to pay its debts or (ii) a resolution is passed, or an order is made, for or in connection with the winding up of that Party (other than for the sole purpose of a scheme for a solvent amalgamation of that Party with one or more other companies or the solvent reorganisation of that Party); or (iii) an order is made for the appointment of an administrator, or if an administrator is appointed over that Party; or (iv) a receiver is appointed over all or any of the assets of that Party; or (v) a creditor or encumbrancer of that Party attaches or takes possession of, or a distress, execution, sequestration or other such process is levied or enforced on or sued against, the whole or any part of the assets of that Party and such attachment or process is not discharged within thirty (30) days; or (vi) any similar insolvency event to any of the foregoing occurs in any jurisdiction; or (vii) that Party suspends or ceases, or threatens to suspend or cease, to carry on all or a substantial part of its business.
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- 11.6. Notwithstanding the foregoing, in the event of any termination under Section 11.5, ASLAN shall use Commercially Reasonable Efforts to assist BIOGENETICS to put in place suitable practical arrangements to enable BIOGENETICS to continue to exercise its rights under this Agreement, including (without limitation) assisting BIOGENETICS to negotiate in good faith with ASLAN's head licensor Array BioPharma Inc. ("Array") a direct licence of the rights for the Licensed Technology in the Territory to BIOGENETICS, on substantially the same terms as are set out in this Agreement, subject to BIOGENETICS covenanting to assure to Array the same obligations (including financial obligations) as it covenants to ASLAN under this Agreement.

12. **EFFECT OF TERMINATION.**

- 12.1. **Accrued Rights, Surviving Obligations.** Termination or expiration of the Agreement for any reason shall be without prejudice to any obligations which shall have accrued prior to such termination or expiration, including, without limitation, any and all damages arising from any breach hereunder.
- 12.2. Upon any termination of the Agreement, the licence granted to BIOGENETICS in Section 2.1 shall terminate, except and only for long as needed by BIOGENETICS to meet its obligations under this Section 12.
- 12.3. Upon any termination of the Agreement for any reason:
- a) BIOGENETICS shall promptly assign and transfer to ASLAN all Regulatory Filings with respect to Products in the Territory that are held or Controlled by or under authority of BIOGENETICS or its Affiliates (including Regulatory Filings obtained by permitted sub-licensees to the extent such sub-licensees' sublicense(s) do not survive the termination of this Agreement), and shall take such actions and execute such other instruments, assignments and documents as may be necessary to effect the transfer of rights under such Regulatory Filings to ASLAN. BIOGENETICS shall cause each of its Affiliates and all such sub-licensees whose sublicense(s) do not survive the termination of this Agreement to transfer any such Regulatory Filings to ASLAN if this Agreement terminates. If applicable laws, rules or regulations prevent or delay the transfer of ownership of a Regulatory Filing to ASLAN, BIOGENETICS shall grant, and does hereby grant, to ASLAN an exclusive and irrevocable right of access and reference to such Regulatory Filing for the Product(s), and shall cooperate fully to make the benefits of such Regulatory Filings available to ASLAN and/or its designee(s). Within ninety (90) days after notice of such termination, BIOGENETICS shall provide to ASLAN copies of all such Regulatory Filings, and of all preclinical and clinical data (including raw data, original records, investigator reports, both preliminary and final, statistical analyses, expert opinions and reports, safety and other electronic databases) and other Know-How information pertaining to the Product, or the manufacture thereof. ASLAN shall be free to use and disclose such Regulatory Filings and other items in connection with the exercise of its rights and licences under this Section 12.3.
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- b) BIOGENETICS shall grant, and hereby does grant, effective upon the effective date of such termination: (i) an exclusive, worldwide, irrevocable, fully paid-up licence to ASLAN to make, use, sell, offer for sale or import Product(s), under any patent rights owned or Controlled by BIOGENETICS or its Affiliates that: (A) were generated by BIOGENETICS or its Affiliates in connection with the Development or Commercialization of the Product(s) prior to the effective date of such termination, or (B) were otherwise utilized by BIOGENETICS, its Affiliates or permitted sub-licensees in the Development or Commercialization of the Product(s); and (ii) a non-exclusive, worldwide, fully-paid licence to ASLAN under any know-How that: (A) were generated by BIOGENETICS or its Affiliates in connection with the development or Commercialization of the Product(s) prior to the effective date of such termination, or (B) were otherwise utilized by BIOGENETICS, its Affiliates or such sub-licensees in the development or Commercialization of the Product(s), in case under the preceding sub-clauses (i) and (ii) solely to the extent reasonably necessary for ASLAN to make, use, sell, offer for sale or import Product(s) in the Field; provided, however, if any such patent rights or other Intellectual Property licensed to ASLAN hereunder is subject to payment obligations to a Third Party, BIOGENETICS shall promptly disclose such obligations to ASLAN in writing and such patent rights or other Intellectual Property shall be deemed to be Controlled by BIOGENETICS only if ASLAN agrees in writing to reimburse all amounts owed to such Third Party as a result of ASLAN's exercise of such licence.
 - c) BIOGENETICS shall cause to be assigned, and hereby does assign, to ASLAN all rights in and to any and all trademarks used in connection with the Commercialization of the Product by BIOGENETICS or its Affiliates. It is understood that such assignment shall not include the name or trademark for BIOGENETICS' company itself.
 - d) If there are any ongoing clinical trials with respect to the Product being conducted by or on behalf of BIOGENETICS, its Affiliates at the time of notice of termination, BIOGENETICS agrees to (i) promptly transition to ASLAN or its designee all of such clinical trials and the activities related to or (ii) terminate such clinical trials; in each case as requested by ASLAN and subject to compliance with applicable laws, rules and regulations.
- 12.4. For a) through d) in Section 12.3 above, ASLAN shall be responsible for the reasonable costs of such transition except in the case of a termination of this Agreement by ASLAN pursuant to Section 11.3 or 11.5, in which case BIOGENETICS shall be responsible for such costs.
- 12.5. (a) If requested by ASLAN, BIOGENETICS or its Affiliates shall continue to distribute and sell the Products in the Territory, in accordance with the terms and conditions of this Agreement, for a period requested by ASLAN not to exceed six (6) months following the effective date of termination ("**Commercialization Wind-Down Period**") provided that ASLAN may
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terminate this Commercialization Wind-Down Period upon thirty (30) days' notice to BIOGENETICS. Notwithstanding any other provision of this Agreement, during this Commercialization Wind-Down Period, BIOGENETICS' and its Affiliates' rights with respect to the Products (including the licences granted under Section 2.1) shall be non-exclusive, and ASLAN shall have the right to engage one or more other partner(s) or distributor(s) of the Products in all or part of the Territory. The Products sold or disposed by BIOGENETICS or its Affiliates during this Commercialization Wind-Down Period shall be subject to royalties under Section 5.3 above. After the Commercialization Wind-Down Period, BIOGENETICS, and its Affiliates shall not sell the Products or make any representation that, or implying that, they are a continuing licensee of or distributor for ASLAN for the Products.

(b) If ASLAN wishes BIOGENETICS or its Affiliates to terminate to distribute and sell the Products in the Territory without the Wind-Down Period mentioned above, ASLAN or its designee(s) shall purchase all quantities of the Product in BIOGENETICS' or its Affiliates' inventory at the price BIOGENETICS actually incurred to purchase the quantities so provided to ASLAN within thirty (30) days after the effective date of termination.

- 12.6. BIOGENETICS agrees to fully cooperate with ASLAN and its designee(s) to facilitate a smooth, orderly and prompt transition of the development and Commercialization of Products to ASLAN and/or its designee(s) during the Commercialization Wind-Down Period. Without limiting the foregoing BIOGENETICS shall, subject to applicable data privacy laws and its relevant contractual confidentiality obligations to Third Parties, promptly provide ASLAN (i) copies of customer lists, customer data and other customer information relating to the Products and (ii) (if applicable) manufacturing information (including protocols for the production, packaging, testing and other manufacturing activities) relating to the Product in BIOGENETICS' Control, which in each case ASLAN shall have the right to use and disclose for any purpose during this Commercialization Wind-Down Period and thereafter. Upon request by ASLAN, BIOGENETICS shall transfer to ASLAN all quantities of the Product in its or its Affiliates' Control (as requested by ASLAN), within thirty (30) days after the end of this Commercialization Wind-Down Period; provided, however, that ASLAN shall reimburse BIOGENETICS for the costs that BIOGENETICS actually incurred to manufacture or purchase the quantities so provided to ASLAN, which in the case BIOGENETICS has manufactured such quantities of Product itself, shall be BIOGENETICS' fully-burdened manufacturing cost. If any Product was manufactured by any Third Party for BIOGENETICS, or BIOGENETICS had contracts with vendors which contracts are necessary or reasonably useful for ASLAN to take over responsibility for the Product in the Territory, then BIOGENETICS shall cooperate to the extent reasonably possible and requested in writing by ASLAN, to assign all of the relevant Third-Party contracts to ASLAN, and in any case, BIOGENETICS agrees to cooperate with ASLAN to ensure uninterrupted supply of the Products. ASLAN shall be responsible for the reasonable costs of such assignment except in the case of a termination of this Agreement by ASLAN pursuant to Section 11.3 or 11.5, in which case BIOGENETICS shall be responsible for such costs. If BIOGENETICS or its Affiliate manufactured any Product at the time of termination, then BIOGENETICS (or its Affiliate) shall continue to provide for manufacturing of such Product for ASLAN, at its fully-burdened manufacturing costs therefor, from the date of notice of such termination until such time as ASLAN is able, using diligent efforts to do so but no longer than the expiration
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of the Commercialization Wind-Down Period, to secure an acceptable alternative commercial manufacturing source from which sufficient quantities of the Product may be procured and legally sold in the Territory.

- 12.7. **Survival.** Sections 5, 6, 7.11, 9, 10, 12 and 13.11 of this Agreement shall survive expiration or termination of this Agreement for any reason. With respect to any termination or expiration of this Agreement, all rights and obligations of the Parties under this Agreement shall terminate upon such expiration or termination, except to the extent otherwise provided in this Article 12.
- 12.8. Termination is not the sole remedy under this Agreement and, whether or not termination is effected, all other remedies will remain available except as agreed to otherwise herein.

13. GENERAL

- 13.1. **Assignment.** This Agreement shall not be assignable by either Party to any Third Party hereto without the written consent of the other Party hereto, not to be unreasonably withheld or delayed except to the extent provided in Section 2.5 under this Agreement. If any permitted assignment would result in withholding or other similar taxes becoming due on payments from the assigning Party to the other Party under this Agreement, the assigning Party shall be responsible for all such taxes resulting from such assignment, and the amount of such taxes shall not be withheld or otherwise deducted from any amounts payable to other Party. No assignment and transfer shall be valid and effective unless and until the assignee/transferee agrees in writing to be bound by the provisions of this Agreement. The terms and conditions shall be binding on and inure to the benefit of the permitted successors and assigns of the Parties.
- 13.2. **Independent status of the Parties.** The Parties to this Agreement are independent contractors and agree that the relationship between the Parties shall not constitute a partnership, joint venture or agency. No Party shall have the authority to make any statement, representation or commitment of any kind, or to take any action, which shall be binding on the other Party, without the prior written consent of the other Party.
- 13.3. **Waiver.** No delay or omission by a Party in exercising or availing itself of any right, power or privilege hereunder shall preclude the later exercise of any such right, power or privilege by such Party. No waiver shall be effective unless made in writing with specific reference to the relevant provision(s) of this Agreement and signed by a duly authorized representative of the Party granting the waiver. Waiver by a Party of a breach hereunder by the other Party shall not be construed as a waiver of any succeeding breach of the same or any other provision.
- 13.4. **Force majeure.** Neither Party shall be deemed to be in breach of this Agreement or otherwise liable to the other by reasons of any delay in performance or non-performance of any of its obligations under this Agreement, to the extent that such delay or non-performance is due to any event of force majeure, including without limitation any wars, insurrections, strikes, acts of God, Governmental actions or controls or any other contingency beyond its control. The Party whose performance of obligations has been delayed by force majeure shall use its best efforts to overcome the effect of the
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force majeure event as soon as possible. The Party affected by the force majeure shall notify immediately to the other Party the existence of the force majeure. The other Party shall have no right to demand indemnity or damages as a result of the force majeure event. If the event of force majeure preventing performance continues for more than six (6) months from the date of notice given pursuant thereto and such suspension of performance would otherwise constitute a material breach under this Agreement, the non-force majeure Party may terminate this Agreement, by giving written notice of termination to the other without liability to any of the Parties, except the obligation to make any payments due up to such date under this Agreement. Termination under this Section 13.4 shall be considered as termination under Section 11.3 provided that no Party shall be entitled to damages or any other legal remedy in connection therewith.

- 13.5. **Entire Agreement.** This Agreement embodies all of the understandings and obligations between the Parties with respect to the subject matter hereof, and supersedes, replaces and cancels all prior agreements or understandings between the Parties with respect to the same.
- 13.6. **Amendments.** No amendments to this Agreement shall be valid unless executed in writing duly authorized signatories of both Parties.
- 13.7. **Notices.** All notices, instructions and other communications hereunder or in connection herewith shall be in writing, shall be sent to the address of the relevant Party set forth below and shall be (a) delivered personally, (b) sent via a reputable international overnight courier service, or (c) sent by facsimile transmission with confirmation by overnight courier. Any such notice, instruction or communication shall be deemed to be delivered by the sending Party in the case of (a) actual receipt, (b) signature of the receipt by the receiving Party and (c) issuance of electronic confirmation of receipt, if transmitted by facsimile (if such transmission is on a Business Day, or otherwise, on the next Business Day following such transmission). Either Party may change its address by giving notice to the other Party in the manner provided above. All notices shall be in English language. Additionally, all information, documents and reports which ASLAN is required to provide or send to BIOGENETICS under this Agreement, and which are not originally in English, shall be sent together with their applicable translation into English.

(a) If to ASLAN:
ASLAN Pharmaceuticals Pte Limited
83 Clemenceau Avenue
#12-03 UE Square
Singapore 239920
Attention: General Counsel
Fax No.: +65 6225 2419

(b) If to BIOGENETICS:
BIOGENETICS CO., LTD

11th Liveplex Tower,
702 Eonju-ro,
Seoul,
Republic of Korea
Attention: Joohoon Ahn / CEO
Fax No.: + 82 2 2622 7799

- 13.8. **Severability.** In the event any portion of this Agreement shall be held illegal, void or ineffective, the remaining portion hereof shall remain in full force and effect and shall not be affected. If any of the terms or provisions of this Agreement are in conflict with any applicable statute or rule of law, then such terms or provisions shall be deemed inoperative to the extent they may conflict therewith and shall be deemed to be modified to conform to such statute or rule of law. However, in case such invalidation or unenforceability injures the rights and interests of either Party, the Parties hereto shall renegotiate the corresponding provisions of this Agreement in good faith.
- 13.9. **Third-Party beneficiaries.** None of the provisions of this Agreement shall be for the benefit of or enforceable by any Third Party including, without limitation, any creditor of any Party hereto. No such Third Party shall obtain any right under any provision of this Agreement or shall by reason of any such provision make any claim in respect of any debt, liability or obligation (or otherwise) against any Party hereto.
- 13.10. **Governing Law.** This Agreement and any dispute arising from the performance or breach hereof shall be governed, construed and enforced in accordance with the laws of Singapore, without regard or giving effect to the conflicts of law principles thereof. The Parties expressly exclude application of the United Nations Convention for the International Sale of Goods.
- 13.11. **Dispute Resolution.**
- (a) **Internal Resolution.** Except as otherwise expressly provided herein, in the event of any controversy, claim or other dispute arising out of or relating to any provision of this Agreement or the interpretation, enforceability, performance, breach, termination or validity hereof (a "Dispute"), such Dispute shall be first referred to the Chief Executive Officer (CEO) of each Party or the Person that each of them may delegate (such delegate being a senior director or above), for resolution, prior to proceeding under the following provisions of this Section. For the avoidance of doubt, this internal resolution proceeding shall not and cannot be used by any of the Parties as a way to modify the rights and obligations under the Agreement or as a way to modify the agreements already reached by the Parties as they have been reflected in the Agreement. Any Parties' resolution under this proceeding shall be resolved in accordance with the terms and conditions of the Agreement and the rights and obligations of the Parties as they are currently reflected in the Agreement. This internal resolution proceeding will be used as the last resort for the Parties to avoid to enter into a dispute to be resolved by
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the arbitration proceeding below. A Dispute shall be referred to such executives upon any Party providing the other Party with written notice that such Dispute exists, and such executives, or their designees, shall attempt to resolve such Dispute through good faith discussions, each Party acting reasonably, within sixty (60) Business Days of being referred to such executives.

- (b) **Arbitration.** Except as otherwise agreed in writing, the Parties agree that any Dispute over any matter which has not been resolved following the procedures set out in Section 13.11(a) must be finally resolved through a binding arbitration which the Parties agree to accept in lieu of litigation or other legally available remedies (except for injunctive relief where such relief is necessary to protect a Party from irreparable harm pending the outcome of the arbitration). Any such arbitration shall be settled in Hong Kong International Arbitration Centre (“HKIAC”) in accordance with its Rules of Arbitration by one (1) arbitrator chosen in accordance with said Rules. The arbitration shall be conducted in English and will be held in Hong Kong. The award rendered by HKIAC shall be binding and final upon the Parties.

13.12. **Use of Name.** None of the Parties is entitled to use the corporate or commercial name of the other Party, for any advertisement or promotional purposes without the prior written consent of the other Party.

13.13. **Awareness.** In this Agreement when a Party’s liability for a statement is limited by the extent of its ‘awareness’, this shall be construed to mean a level of awareness assuming reasonable enquiries have been made.

13.14. **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

14. **NEW COMMERCIAL ENTITY**

14.1. The Parties acknowledge that ASLAN and BIOGENETICS may wish in the future to establish a new commercial entity (the “**Commercial JV Co**”) intended to promote the introduction and Commercialization of oncology drugs in the Territory.

14.2. If the Commercial JV Co is established, the financial and other terms and conditions set out in this Agreement shall be reviewed and discussed by both parties and revised as mutually agreed. However the Parties agree to negotiate in principle that:

- (a) BIOGENETICS shall own a majority stake in the Commercial JV Co;
 - (b) ASLAN shall own a minority stake in the Commercial JV Co but shall have board representation; and
 - (c) ASLAN shall have a right (but not the obligation) to co-invest at each funding round for the Commercial JV Co at a valuation per share (to be negotiated among ASLAN, BIOGENETICS and where relevant, other investors) applying to other new investors in the Commercial JV in each funding round.
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14.3. Prior to establishing the Commercial JV, ASLAN and BIOGENETICS shall enter into a separate definitive agreement setting forth among others, the ownership structure described in Section 14.2 above, the rights and obligations of ASLAN and BIOGENETICS and other terms.

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals by their duly authorized representatives as of the date and year first above written.

Each person executing this Agreement on behalf of a Party represents and warrants his / her capacity and authority to do so.

ASLAN PHARMACEUTICALS PTE LTD

BIOGENETICS CO., LTD

By: /s/ Carl Firth
Name: Carl Firth
Title: CEO

By: /s/ Joohoon Ahn
Name: Joohoon Ahn
Title: CEO

Date: 27th February 2019

Date: 27th February 2019

Schedule 1

[...***...]

Schedule 2

[...***...]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [...***...], HAS BEEN OMITTED BECAUSE ASLAN PHARMACEUTICALS PTE LTD. HAS DETERMINED THE INFORMATION (I) IS NOT MATERIAL AND (II) WOULD LIKELY CAUSE COMPETITIVE HARM TO ASLAN PHARMACEUTICALS PTE LTD. IF PUBLICLY DISCLOSED.

**LICENCE AGREEMENT
FOR ASLAN003
BETWEEN
ASLAN Pharmaceuticals Pte Ltd
AND
BioGenetics Co., Ltd.**

Dated: 11th March 2019

THIS AGREEMENT is made on _____ 2019

BETWEEN:-

- (1) **ASLAN PHARMACEUTICALS PTE. LTD.** (“**ASLAN**”), incorporated and registered in Singapore with company number 201007695N, having its principal offices at 83 Clemenceau Avenue, #12-03 UE Square, Singapore 239920; and
- (2) **BIOGENETICS CO., LTD.** (“**BIOGENETICS**”), a Republic of Korea corporation having its principal offices at 11th Liveplex Tower, 702 Eonju-ro, Gangnam-gu, Seoul, Republic of Korea.

WHEREAS:-

A. ASLAN owns, and has a master licence from Almirall S.A. for, certain intellectual property rights and know-how with respect to that certain chemical compound designated by ASLAN as ASLAN003, and believes that ASLAN003 has the potential to become a therapeutic drug with significant commercial potential.

B. ASLAN desires to find a partner capable of realizing promptly the therapeutic and commercial potential of Products in the Territory and within the Field (terms as defined below).

C. BIOGENETICS possesses pharmaceutical development capabilities, and desires to collaborate with ASLAN to develop the therapeutic and commercial potential of Products in the Territory.

D. Now, therefore, in consideration of the premises and mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. DEFINITIONS AND INTERPRETATION

1.1. The definitions and rules of interpretation in this Section apply in this Agreement:

“**Affiliate**” shall mean, with respect to a legal entity, any corporation or other entity which directly or indirectly Controls, is Controlled by or is under common Control with, such entity.

“**Almirall Head Licence Agreement**” shall mean a licence agreement between ASLAN and Almirall S.A. originally dated 16th May 2012 and most recently re-stated in amended form on 16th March 2018 which grants exclusive worldwide rights over ASLAN003 to ASLAN.

“**ASLAN003**” shall mean the synthetic chemical entity identified as [...***...] by its ultimate owner Almirall SA and identified by ASLAN as ASLAN003, which is an inhibitor of human dihydroorotate dehydrogenase and Improvements thereto made during the Term of this Agreement.

“**ASLAN In-Licensed Know-How**” means all results, data, know-how, compounds, processes, discoveries, formulations, materials, inventions, techniques or proprietary confidential information which:

- (a) are necessary for manufacturing, applying for and obtaining marketing authorisations or licences in respect of, marketing or selling Products; and
- (b) are licensed to ASLAN pursuant to the Almirall Head Licence Agreement in respect of which, and to the extent that, ASLAN is entitled to grant a sub-licence of such know-how.

"ASLAN In-Licensed Patents" means patents and patent applications listed in Schedule 1 part (i) licensed to ASLAN at the date of the Agreement pursuant to the Almirall Head Licence Agreement, to the extent that ASLAN is entitled to grant sub-licences of the same, and to the extent that they relate to the Commercialization of Products, to the extent that ASLAN is entitled to grant sub-licences of the same.

"ASLAN Know-How" shall mean all results, data, know-how, compounds, processes, discoveries, formulations, materials, inventions, techniques or proprietary confidential information which:

- (a) are necessary for researching, developing, manufacturing, applying for and obtaining marketing authorisations or licences in respect of, marketing or selling Products; and
- (b) are owned or Controlled by ASLAN as at the date of this Agreement.

"ASLAN Patents" shall mean the patents and patent applications owned or Controlled by ASLAN relating to ASLAN003 and listed in Schedule 1 parts (i) and (ii), and any other patents and patent applications relating to Products Controlled by ASLAN from time to time during the Licence Period covering the Territory.

"Business Day" means a day that is not a Saturday, Sunday or public holiday in Singapore or the Republic of Korea.

"Claim" means, in relation to a person, a demand, claim, action or proceeding made or brought by or against the person, however arising.

"Commercialize" means use, apply for or obtain marketing authorizations or licences, import, sell, have sold, promote, market or distribute, and, if agreed in accordance with Section 4.2, manufacture, have manufactured, make and have made; and "Commercialization" shall be construed accordingly;

"Commercially Reasonable Efforts" shall mean the carrying out of obligations or tasks in a reasonable, good faith, and diligent manner consistent with efforts and resources as commonly used by a company with experience and expertise in the development and commercialization of pharmaceutical products, in such a company's ordinary course of business, for a pharmaceutical product at a similar stage of research and development, and having similar market potential to the Product, taking into account, without limitation, issues of safety, efficacy, product profile, status of the Product, the development costs, the regulatory environment, and other scientific factors, market conditions then prevailing, including competitive environment, profitability the competitiveness of alternative products that are or are expected to be in the relevant marketplace, and other similar factors.

"Competing Product" means any product which is intended to be used for the treatment of same disease indications as Products (now or in the future) by means of an agent that has the same mechanism of action (DHODH inhibitor) as ASLAN003.

"Confidential Information" has the meaning given to it in Section 10.1.

"Control," "Controls," "Controlled" or "Controlling" shall mean:

- (a) in relation to a legal entity, the possession, directly or indirectly, of more than 50% of the issued shares in that entity or the power to direct, or cause the direction of, the management or policies of that entity, whether through the ownership of voting securities, by contract or otherwise; and;
- (b) in relation to Intellectual Property, possession of the ability to grant the licences or sub-licences as provided herein without violating the terms of any agreement or other arrangements with any Third Party.

“Clinical Trial Costs” means the costs incurred by ASLAN, as from the Effective Date up till the date of ASLAN’s Buy-Back Notice (as defined in Section 15.2), of carrying out clinical trials and clinical studies for the Product, such trials or studies being additional or supplementary to the Ongoing Clinical Trials as listed and defined and in Schedule 2; including, without limitation, costs of clinical research organisations, payments to clinical trial centres, and costs of Regulatory Filings.

“Clinical Trial Costs Contribution” shall be as defined in Section 5.2.

“Effective Date” shall mean 11th March 2019.

“Field” shall mean all human and animal therapeutic, diagnostic and prophylactic uses, excluding topically administered products for the treatment of keratinocyte hyperproliferative disorders and the following non-melanoma skin cancers: basal cell carcinoma, squamous cell carcinomas and Gorlin Syndrome.

“First Commercial Sale” means the first commercial sale of a Product in the relevant indication in the Field in the Territory by BIOGENETICS, or its Affiliates. Sales for clinical study purposes, “early access programs” or similar uses shall not constitute a First Commercial Sale. In addition, sales of a Product between BIOGENETICS and its Affiliates shall not constitute a First Commercial Sale.

“Improvement” means any improvement, development, modification or enhancement of the ASLAN Patents, the ASLAN Know-How or the Licensed Technology, whether patentable or not.

“Intellectual Property” (or **“IP”**) shall mean any patents, rights to inventions, registered designs, copyright and related rights, database rights, design rights, topography rights, trade marks, service marks, trade names and domain names, trade secrets, confidential information, rights in unpatented know-how, and any other intellectual or industrial property rights of any nature including all applications (or rights to apply) for, and renewals or extensions of such rights and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world.

“Generic Product” means with respect to the Product, a pharmaceutical product (a) containing ASLAN003 (b) that has obtained MFDS approval in the Territory solely by means of a procedure for establishing equivalence to the Product; and (c) that is legally marketed in such country by or under authority of an entity other than BIOGENETICS or its Affiliates.

“Liabilities” means Claims, losses, liabilities, costs, expenses or damage of any kind and however arising, including investigative costs, court costs, legal fees, penalties, fines and interest and amounts paid in settlement.

“Licence Period” shall mean the period commencing on the Effective Date and, unless terminated earlier pursuant to the terms of this Agreement, expiring on the tenth (10th) anniversary of the date of First Commercial Sale, subject to Section 11.2.

“Licensed Know-How” means the ASLAN Know-How, the ASLAN In-Licensed Know How and ASLAN’s interest in any Improvements which are not patented.

“Licensed Patents” means the ASLAN Patents, and the ASLAN In-Licensed Patents.

“Licensed Technology” shall mean the Licensed Patents and the Licensed Know-How, including any right, title and interest in any Improvements assigned to ASLAN pursuant to Section 7.11.

“Licensing Revenue” means all gross revenue that BIOGENETICS receives from a Third Party in connection with Commercialization of the Licensed Technology.

“Material Safety Risk” means, in a Party’s reasonable belief, there is an unacceptable risk a Product will cause harm in humans (according to the regulatory or ethical practices in the Territory) based upon: (i) pre-clinical safety data, including data from animal toxicology studies; or (ii) the observation of serious adverse effects in humans after that Product has been administered to or taken by humans, such as during a clinical trial or after the launch of such Product.

“MFDS” shall mean the Korean Ministry of Food and Drug Safety (formerly known as the Korea Food & Drug Administration).

“Net Sales” shall mean in respect of direct sales to Third Parties by BIOGENETICS and its Affiliates in the Territory, the gross invoice price charged from time to time by BIOGENETICS or by its Affiliates, together with all upfront payments, milestones payments, or advances, as the case may be (referred to herein as the **“Selling Party”**), for all Products sold or supplied by the Selling Party, in arm’s length sales or supplies to Third Parties less deductions allowed to the Third Party customer by the Selling Party, to the extent actually taken by the Third Party customer, on such sales for:

- trade, quantity, and cash discounts (including to wholesalers) consistent with usual industry practice in the Territory;
- credits, rebates and chargebacks (including those to managed-care entities and government agencies), and allowances or credits to customers on account of rejection or returns (including, but not limited to, wholesaler and retailer returns);
- freight, postage and duties, and transportation charges specifically relating to Product, including handling and insurance thereto; and
- sales (such as VAT or its equivalent) and excise taxes, other consumption taxes, customs duties and compulsory payments to governmental authorities and any other governmental charges imposed upon the sale of such Product to Third Parties;

In the event of supplies to Third Parties for non-cash or nil consideration, the gross invoice price charged from time to time by the Selling Party shall be deemed to have been charged for such supply, and prices shall be calculated and payable on the basis set out in Section 5.

Sales among the Selling Party and its Affiliates shall be excluded from the computation of Net Sales.

“NHIP” shall mean the National Health Insurance Price in the Territory for the Product as determined and approved from time to time by the relative government authorities.

“Ongoing Clinical Trials” means those clinical trials and clinical studies run by ASLAN which were completed or ongoing as at the Effective Date for the Product, as detailed in Schedule 2.

“Party” shall mean a party to this Agreement.

“Product” shall mean, unless otherwise defined, any pharmaceutical or medicinal item, substance, formulation or dosage for human use containing ASLAN003 as an active ingredient.

“Regulatory Filings” means, with respect to Products, any preparation and/or submission to MFDS or any other regulatory body in the Territory with authority to grant marketing approvals for Products, of any regulatory application together with any material related correspondence and documentation and shall include, without limitation, any submission to a regulatory advisory board, marketing authorization application, and any supplement or amendment thereto. For the avoidance of doubt, Regulatory Filings shall include any IND, MAA or the equivalent in the Territory.

“Territory” shall mean the Republic of Korea.

“Third Party” shall mean any entity other than ASLAN, BIOGENETICS or any Affiliate of ASLAN or BIOGENETICS.

“Varlitinib Agreement” means an agreement between the Parties dated 27th February 2019 relating to the exclusive licensing in the Territory of rights in the drug known as ASLAN001 and with the generic name *varlitinib*.

“Varlitinib Products” means any pharmaceutical or medicinal item, substance, formulation or dosage for human use containing ASLAN001 as an active ingredient, as governed by the Varlitinib Agreement

- 1.2. Section, Schedule and paragraph headings shall not affect the interpretation of this Agreement.
- 1.3. The Schedules form part of this Agreement and shall have effect as if set out in full in the body of this agreement and any reference to this Agreement includes the Schedules.
- 1.4. Unless the context otherwise requires, words in the singular include the plural and in the plural include the singular.
- 1.5. Unless the context otherwise requires, a reference to one gender shall include a reference to the other genders.
- 1.6. Writing or written includes faxes.
- 1.7. Any words following the terms ‘including’, ‘include’, ‘in particular’ or any similar expression shall be construed as illustrative and shall not limit the sense of the words preceding those terms.
- 1.8. A “person” includes a natural person, corporate or unincorporated body (whether or not having separate legal personality), partnership, joint venture and a government or statutory body or authority.

- 1.9. If a word is defined or phrase is defined, its other grammatical forms have the corresponding meaning.
- 1.10. No rule of construction will apply to a provision to the disadvantage of a Party merely because that Party proposed the provision or would otherwise benefit from it.

2. LICENCE GRANT

- 2.1. Subject to the terms of this Agreement, ASLAN hereby grants to BIOGENETICS an exclusive, even as to ASLAN, license under ASLAN's rights in the Licensed Technology to Commercialize and, if agreed in accordance with Section 4.2, manufacture Products in the Territory in the Field. To make it clear, ASLAN shall not distribute the Products nor grant to Third Party any license to Commercialize the Products in the Territory during the Licence Period of this Agreement.
- 2.2. All rights granted in this Agreement by ASLAN to BIOGENETICS shall be exercised in the Territory, during the Licence Period and in accordance with the terms and conditions set out in this Agreement.
- 2.3. For the avoidance of doubt, ASLAN shall retain all rights to the Licensed Technology other than the commercial and (subject to Section 4.2) manufacturing rights granted to BIOGENETICS under Section 2.1.
- 2.4. During the Licence Period and for one (1) year thereafter, neither BIOGENETICS, nor any of its Affiliates, will conduct, participate in, or fund, directly or indirectly, either alone or with a Third Party, the development, manufacture or commercialization of a Competing Product, or conduct a drug discovery or other research program the goal of which is to identify Competing Products ("**Competing Products Development**"); provided however, BIOGENETICS may participate in the Competing Products Development during the Licence Period with the prior written approval of ASLAN.
- 2.5. None of the rights under this Agreement may be sub-licensed or sub- contracted by BIOGENETICS unless ASLAN's prior written consent has been obtained; provided however, BIOGENETICS may assign, transfer, sub-license or sub-contract to an its Affiliates.

3. DILIGENCE

- 3.1. BIOGENETICS and/or its Affiliates shall use Commercially Reasonable Efforts to (i) obtain marketing approvals for Products in the Territory, and (ii) Commercialize Products in the Territory after receipt of such marketing approvals.
- 3.2. BIOGENETICS's activities under Section 3.1 shall be performed by BIOGENETICS at its sole risk and responsibility, cost and expense, and in compliance with all applicable laws and regulatory requirements, including without limitation GCP, GLP and GMP. Therefore, BIOGENETICS assumes full responsibility for any loss or damage derived from the conduct and performance of this Agreement and shall be responsible for any such Claims resulting from such activities except to the extent that such loss or damage arises out of or results from, directly or indirectly, breach of any term of this Agreement, negligence, or wilful misconduct of ASLAN.

- 3.3. **Information and Reports.** BIOGENETICS shall keep ASLAN informed regarding the ongoing Commercialization of Products through reasonably detailed reports to be provided to ASLAN on a semi-annual basis, together with, if requested by ASLAN, face to face meetings or telephone conferences to discuss the same during ordinary business hours of BIOGENETICS. Such semi-annual reports shall include summaries of all material activities (including regulatory activities) and results with respect to the Products in the Territory. ASLAN shall keep BIOGENETICS informed regarding the ongoing development status of Products including but not limited to any clinical trial studies, registration status and price information in other countries except for the Territory through reasonably detailed reports to be provided to BIOGENETICS on a semi-annual basis, together with, if requested by BIOGENETICS, face to face meetings or telephone conferences to discuss the same during ordinary business hours of ASLAN. ASLAN shall keep BIOGENETICS informed regarding the ongoing Clinical Trial Costs through a reasonably detailed report to be provided to BIOGENETICS on an annual basis. BIOGENETICS shall have fifteen (15) days from the date of such report to review and raise any bona fide queries on the same. If ASLAN does not receive a notice of inquiries within such fifteen (15)-day period, BIOGENETICS shall be deemed to accept such report and ASLAN may thereafter submit its invoice. BIOGENETICS shall pay the invoice within thirty (30) days in accordance with Section 5.2. The provisions of Section 6 shall apply to ASLAN's record keeping in respect of the Clinical Trial Costs and BIOGENETICS's rights of inspection thereof, *mutatis mutandis*. Notwithstanding the foregoing, and for the purposes of Section 5.3:
- (a) ASLAN shall promptly (and in any event within 30 days) inform BIOGENETICS of the occurrence of FDA approval for the first indication for a Product; and
 - (b) BIOGENETICS shall promptly (and in any event within 30 days) inform ASLAN of the occurrence of the other events relating to Products triggering milestone payments set out in Section 5.3.
- 3.4. **Responsibility for regulatory interactions.** BIOGENETICS shall be responsible for the preparation and filing of any and all Regulatory Filings. ASLAN shall use Commercially Reasonable Efforts to provide BIOGENETICS with appropriate documents and data required, and general cooperation, to enable the dossiers and other documentation required for MFDS submissions and other Regulatory Filings to be completed. All such Regulatory Filings will be filed in BIOGENETICS' name and/or on its behalf. BIOGENETICS shall promptly notify ASLAN of all Regulatory Filings submitted or received by BIOGENETICS or its Affiliates with respect to Products, and upon ASLAN's request, shall provide to ASLAN one paper copy or electronic file of all such regulatory Filings. Additionally, BIOGENETICS will upon ASLAN's request, to the extent reasonably required to confirm BIOGENETICS' compliance with its obligations hereunder, provide ASLAN with reasonable additional information and data generated by or on behalf of BIOGENETICS in such semi-annual period, it being understood that ASLAN shall keep such information and data in strict confidence. Notwithstanding the foregoing, prior to any application for determination of NHIP for Products, BIOGENETICS and ASLAN shall discuss the range of target pricing to seek in such application, including a lowest acceptable price, and ASLAN's prior approval (not to be unreasonably withheld or delayed) shall be obtained before such application is made. Any formal acceptance by

BIOGENETICS of a NHIP price proposed by the relative government authorities which is lower than the lowest acceptable price agreed with ASLAN beforehand, shall require prior discussion with ASLAN and ASLAN's prior approval, which shall not be unreasonably withheld or delayed.

- 3.5. The Parties shall establish procedures for the exchange and reporting of all adverse events related to the Product, which shall be governed by a Pharmacovigilance & Safety Exchange Agreement, to be entered into in due course.

4. MANUFACTURE & SUPPLY

- 4.1 ASLAN agrees to provide clinical drug supplies to BIOGENETICS required for Regulatory Filings by or on behalf of BIOGENETICS and for Commercialisation of Products, pursuant to a separate manufacturing and supply agreement to be negotiated in good faith by the Parties and which the Parties shall use Commercially Reasonable Efforts to enter into no later than 30th June 2020.
- 4.2 Notwithstanding the foregoing, that if BIOGENETICS wishes to manufacture by itself or have manufactured by a third party the Products during the Licence Period under this Agreement, ASLAN agrees to engage in good faith discussions, using Commercially Reasonable Efforts, to negotiate and execute a manufacturing licence conferring such rights on BIOGENETICS.

5. PAYMENTS TO ASLAN

- 5.1 **Initial Payment.** In consideration of the licenses and rights granted to BIOGENETICS hereunder, BIOGENETICS shall pay to ASLAN an initial payment of one million USD (US \$1,000,000) (“**the Initial Payment**”), to be paid no later than thirty (30) days of ASLAN's invoice for the same, which may be issued to BIOGENETICS any time from mutual signature of this Agreement. The Initial Payment shall consist of (a) an upfront licence fee component, and (b) a reimbursement component, to cover ASLAN's costs associated with the development of the Product in the Territory up to the Effective Date. The Parties shall work in good faith to agree the relative allocation of the different components of the Initial Payment in writing as soon as possible after the Effective Date and in any event no later than 31st March 2019. The Parties acknowledge that BIOGENETICS may be required to pay Korean withholding tax (“**WHT**”) at a rate of [...***...] percent ([...***...] %) on all or part of the Initial Payment, depending on the agreed allocation and the WHT treatment in Korea of the different components, but that as of the Effective Date this issue has not been finally determined between the Parties. If a suitably qualified tax expert agreeable to both Parties determines by 31st March 2019 the exact amount of WHT (if any) required to be paid by BIOGENETICS to the Korean National Tax Service, then BIOGENETICS may make payment in satisfaction of ASLAN's invoice for the Initial Payment as above, net of such WHT, subject always to Section 5.6.
- 5.2 **Clinical Trial Costs Contribution.** BIOGENETICS agrees to reimburse ASLAN for [...***...] per cent ([...***...] %) of its Clinical Trial Costs for Products designed for the treatment of acute myeloid leukemia, incurred as from the Effective Date (“**the Clinical Trial Costs Contribution**”). ASLAN shall invoice BIOGENETICS for the Clinical Trial Costs Contribution on an annual basis, and, subject to Section 3.3, BIOGENETICS shall pay such invoice within thirty (30) days of receipt.

5.3 **Milestone Payments.** Upon achieving certain milestones as set out below, BIOGENETICS will make one-time milestone payments to ASLAN:

MILESTONE PAYMENTS	
5.3.1 Development milestones	
First Complete Response in current Phase 2 study	USD\$ [...***...] ([...***...] dollars)
First indication – First Commercial Sale	USD\$ [...***...] ([...***...] dollars)
Second indication - First Commercial Sale	USD\$ [...***...] ([...***...] dollars)
5.3.2 Sales milestones	
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$ [...***...] ([...***...] dollars)
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$ [...***...] ([...***...] dollars)
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$ [...***...] ([...***...] dollars)
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$ [...***...] ([...***...] dollars)
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$ [...***...] ([...***...] dollars)
Annual Net Sales in Territory exceed \$[...***...] ([...***...] US dollars):	USD\$ [...***...] ([...***...] dollars)

5.3.3 In relation to Section 5.3.2:

(a) The references to “Annual Net Sales” in Section 5.3.2 shall mean the aggregate of annual Net Sales of Products covered by this Agreement plus annual Net Sales of Varlitinib Products. As from the Effective Date of this Agreement, the Parties agree that Section 5.3 of the Varlitinib Agreement shall be deemed superseded by Section 5.3.2 above.

(b) Where the Product is approved in different indications, Net Sales for the different indications for that drug shall be aggregated for the purposes of calculating whether Net Sales during any calendar year have reached milestones as set out above.

5.4 **Royalties.** Royalties shall be paid by BIOGENETICS to ASLAN in accordance with this Section 5.4 on Net Sales of the Products in the Territory in the Field, as follows:

For Net Sales up to the equivalent of US\$[...***...] ([...***...] US dollars) during any particular calendar year:	[...***...]% ([...***...] percent) on Net Sales
For Net Sales above the equivalent of US\$[...***...] ([...***...] US dollars) and up to US\$[...***...] ([...***...] US dollars) during any particular calendar year	[...***...]% ([...***...] percent) on Net Sales
For Net Sales above the equivalent of US\$[...***...] ([...***...] US dollars) during any particular calendar year	[...***...]% ([...***...] percent) on Net Sales

In relation to Section 5.4:

(a) The references to “Net Sales” shall mean the aggregate of annual Net Sales of Products covered by this Agreement plus annual Net Sales of Varlitinib Products. As from the Effective Date of this Agreement, the Parties agree that Section 5.3A of the Varlitinib Agreement shall be deemed amended accordingly.

(b) Where the Product is approved in different indications, Net Sales for the different indications for that drug shall be aggregated for the purposes of calculating royalties as set out above.

- 5.5 Payments to ASLAN shall be on a quarterly basis and in US dollars and shall be made within thirty (30) days following the applicable calendar quarter.
- 5.6 **Taxes.** BIOGENETICS agrees to pay to ASLAN the full amount of all payments stated in this Agreement without deductions, subject to compliance with applicable laws. For the avoidance of doubt, ASLAN shall bear ultimate liability for any tax or duties arising as a result of such payments (whether in Singapore, the Territory or otherwise). In the event that BIOGENETICS is required to withhold any taxes on amounts payable to ASLAN in accordance with applicable laws, each Party agrees to provide the other with reasonable assistance including provision of any tax forms, evidence of taxes withheld and such other information as may be reasonably necessary in order for the paying Party not to withhold tax, to withhold tax at a reduced rate under an applicable bilateral income tax treaty or for ASLAN to reclaim withheld tax. The foregoing provisions shall apply *mutatis mutandis* to payments by ASLAN pursuant to Section 15.
- 5.7 **Statement.** At the time of each quarterly payment in accordance with Section 5.4, BIOGENETICS shall provide ASLAN with a statement specifying:
- 5.7.1 the nature of and amount of the payment received that contributes to Licensing Revenue (including copies of any notifications, reports or statements from any Third Party relating to the contribution);
- 5.7.2 the calculation of Licensing Revenue based on such payment including details and amount of any deductions made in calculating such revenue;
- 5.7.3 details of any exchange rates used to convert any currencies;
- 5.7.4 details of the Net Sales for the period of the statement; and
- 5.7.5 a statement of the amount of payment due to ASLAN in respect of such Licensing Revenue;
- 5.7.6 upon receipt of such statement, ASLAN may issue an invoice to BIOGENETICS for such amount. Within 30 days of receipt of such invoice, BIOGENETICS must remit payment to ASLAN to a bank account nominated by ASLAN
- 5.7.7 in respect of the fourth quarter of each calendar year, where there has been over- or under-payment to ASLAN over the previous calendar year based on the rates applicable for Net Sales in each calendar year, an explanation of any relevant adjustments (up or down) in the payment for that fourth quarter.

- 5.8 **Royalty Term.** Royalties payable under this Section 5 shall be paid on a Product-by-Product basis with respect to Net Sales made during the Licence Period.
- 5.9 **Generics.** From the time that the Licensed Patents have expired and one or more Third Parties is selling a Generic Product in the Territory, then as from the next quarter year the royalty applicable under Section 5.4 shall be discounted by [...***...] ([...***...]).
- 5.10 **Interest.** Where ASLAN does not receive payment of any sum required on or before the day on which such payment is due, BIOGENETICS shall pay ASLAN interest on the past due amount as follows: interest shall accrue thereafter on the sum due and owing to ASLAN at the lesser of seven percent (7%) over the LIBOR rate for a three month deposit in US dollars on the last Business Day of the previous calendar month, or the maximum amount allowed by law, with interest to accrue on a day to day basis without prejudice to ASLAN's right to receive payment on the due date.
- 5.11 **Economic Viability.** If any of the following apply:
- (a) sales of Generic Products in the Territory result in an erosion of 60% or more of the price of Products in the Territory from the price at First Commercial Sale;
 - (b) fluctuations in the exchange rate between the South Korean won and US dollar for a continuous period of more than two (2) months, resulting in a differential of higher than twenty per cent (20%) in comparison to the exchange rate in force on the date of signature of this Agreement; or
 - (c) the official Korean reimbursement price for a Product as determined from time to time by the respective governmental authority shows dramatic change (that is to say, at the end of any two month period there has been a more than 10% aggregate increase or decrease),

the Parties shall meet together either face to face or by telephone conference to discuss how to proceed, including without limitation adjusting NHIP with the consent of both Parties.

- 5.12 **Almirall Head Licence Agreement.** BIOGENETICS will take all reasonable steps to assist ASLAN in ensuring that it complies with its obligations under the Almirall Head Licence Agreement.

6. RECORDS AND ACCOUNTS

- 6.1. BIOGENETICS must keep complete and accurate records of all matters connected with the Commercialization of Products and must also keep proper accounts in relation to Licensing Revenue and other payments payable to ASLAN under this Agreement containing all data necessary for the calculation of the amounts payable to ASLAN pursuant to this Agreement. BIOGENETICS must keep those records and books of account for five (5) years following the end of the year to which they relate.

- 6.2. Not more than once in any twelve (12) month period, BIOGENETICS must permit during business hours an independent accountant nominated by ASLAN to inspect the records and accounts maintained under Section 6.1 for the purpose of verifying their accuracy with a prior notice of ten (10) Business Days, and confirming whether all payments payable to ASLAN under this Agreement have been properly calculated and paid by BIOGENETICS.
- 6.3. BIOGENETICS must provide to the accountant such assistance as is reasonably required by that person in order to verify the accuracy of those records and accounts and confirm whether all payments payable to ASLAN under this Agreement have been properly calculated and paid by BIOGENETICS.
- 6.4. If ASLAN's inspection reveals that any monies are outstanding then BIOGENETICS must, within 30 days after receiving notice of the amount due, pay ASLAN the outstanding amount. If the inspection reveals there was an overpayment then the amount of the overpayment may be credited against future payments due to ASLAN under this Agreement.
- 6.5. ASLAN shall bear the cost of the independent accountant appointed under this Section 6 except if the inspection reveals that any monies are outstanding by more than 5%, in which case BIOGENETICS must pay ASLAN's reasonable inspection costs.

7. INTELLECTUAL PROPERTY

Patent Prosecution

- 7.1. ASLAN shall have the right to control the preparation, filing, prosecution and maintenance of all the ASLAN Patents. ASLAN shall give BIOGENETICS an opportunity to review and comment on the text of each patent application for the Territory within the ASLAN Patents, as well as any other material submissions related to the ASLAN Patents in the Territory before filing, and shall supply BIOGENETICS with a copy of such patent application as filed, together with notice of its filing date and serial number. BIOGENETICS has a right to make reasonable recommendations in relation to the filing, prosecution, maintenance, enforcement and defence of the ASLAN Patents in the Territory and ASLAN shall and shall accept BIOGENETICS's recommendations, in good faith, unless such recommendations would adversely affects the ASLAN Patents in the Territory.
- 7.2. BIOGENETICS shall reimburse ASLAN for the amounts paid to Third Parties by ASLAN in connection with the filing, prosecution and maintenance of the ASLAN Patents in the Territory as from the Effective Date, including without limitation, amounts paid by ASLAN as filing and maintenance fees, translation fees and amounts paid to outside patent counsel and foreign associates ("**Patent Costs**"). ASLAN shall provide BIOGENETICS with an invoice for Patent Costs on a monthly basis, and payment shall be due within thirty (30) days thereafter.
- 7.3. If ASLAN, in its sole discretion, which discretion shall not be exercised unreasonably, decides to abandon the preparation, filing, prosecution or maintenance of any patent or patent application in the ASLAN Patents in the Territory, then ASLAN shall notify BIOGENETICS in writing thereof at least ninety (90) days prior to any due date that requires action to avoid loss of rights in connection with the applicable patent and/or patent application, and following the date of such notice BIOGENETICS shall have the

right, at its cost, to prosecute and maintain such patents and patent applications in ASLAN's name, provided that BIOGENETICS shall give ASLAN an opportunity to review and comment on the text of each patent application or other material submissions related to the ASLAN Patents before filing, and shall supply ASLAN with a copy of such patent application as filed, together with notice of its filing date and serial number.

Enforcement

- 7.4. In the event that either Party becomes aware of actual or threatened infringement of any ASLAN Patents in any country in the Territory by the manufacture or sale or use of a Product or competing product in the Field ("**Infringing Product**"), it shall provide the other Party with the available evidence, if any, of such infringement.
- 7.5. ASLAN, at its sole expense, shall have the initial right to initiate and control any enforcement of the ASLAN Patents in the Territory with respect to an Infringing Product or to defend any declaratory judgments seeking to invalidate or hold the ASLAN Patents unenforceable (each, an "**Enforcement Action**"), in each case in ASLAN's own name and, if necessary for standing purposes, in the name of BIOGENETICS or its nominee and shall protect, in good faith, the interests of BIOGENETICS in taking such enforcement action. If ASLAN does not, within one hundred twenty (120) days of receipt of notice from BIOGENETICS, take significant steps to abate the infringement or file suit to enforce the ASLAN Patents against at least one infringing party in the Territory, BIOGENETICS shall have the right to take whatever action it deems appropriate to enforce the ASLAN Patents. To make it clear of the responsibilities on the costs and expenses for the afore-mentioned enforcement action taken by BIOGENETICS, ASLAN shall fully reimburse the reasonable costs and expenses incurred to BIOGENETICS unless BIOGENETICS has breached the terms and conditions of this Agreement. The Party controlling any such enforcement action shall not settle the action or otherwise consent to an adverse judgment in such action that diminishes the rights or interests of the non-controlling Party (including in the case of BIOGENETICS, entering into any settlement admitting the invalidity of, or otherwise impairing, the ASLAN Patents) without the prior written consent of the other Party. All monies recovered upon the final judgment or settlement of any such suit to enforce the ASLAN Patents shall be shared, after reimbursement of expenses, as follows: (i) in the event that ASLAN brought the claim, suit or action, any remaining amount shall be shared eighty percent (80%) to ASLAN, 20% to BIOGENETICS, and (ii) in the event that BIOGENETICS brought the claim, suit or action, any remaining amount shall be retained by BIOGENETICS.
- 7.6. In any suit to enforce and/or defend the ASLAN Patents pursuant to this Section 7, the Party not in control of such suit (a) shall, at the request and expense of the controlling Party, (b) reasonably cooperate and, to the extent possible, have its employees testify when requested and make available relevant records, papers, information, samples, specimens, and the like, and (c) further agrees to be named in and consents to join in any suit, action, or proceeding as a party to the suit, action, or proceeding to the extent necessary to establish standing in the suit, action, or proceeding.
- 7.7. If a Third Party asserts that a patent or other right owned by it is infringed by the manufacture, use, marketing, sale or importation of any Product, the Party becoming aware of such a matter shall immediately notify the other of it. ASLAN shall have the right to initiate, prosecute, defend and control legal action (whether by suit, proceedings, counter-claim, oppositions, customs procedure or otherwise) in respect of any such assertion. BIOGENETICS shall have the right actively to co-operate and join with ASLAN in any legal action if it (acting in good faith and reasonably) considers it necessary or desirable, and ASLAN shall have the right to have BIOGENETICS and/or its nominee joined as a passive party to any legal action if necessary, and in either

circumstance each party shall reasonably co-operate with the other in regard to the same. All costs and expenses (including attorneys' fees) of any legal action brought in accordance with this Section 7.7, shall be borne by ASLAN, provided that where ASLAN is bearing BIOGENETICS's costs and expenses (including attorneys' fees) if BIOGENETICS actively elects to be joined as a party to such action (as above), these shall be reasonable. Any monetary recovery in connection with legal action shall be applied first to reimburse ASLAN for its out-of-pocket costs and expenses (including management time and reasonable attorneys' fees) incurred in connection with any legal action. The remainder shall be split between the Parties in proportion to the relative degree of their active involvement in connection with the action, but if the Parties, acting in good faith, cannot agree such relative proportions, then on the basis of 50% to BIOGENETICS and 50% to ASLAN.

- 7.8. **Patent Marking.** BIOGENETICS agrees to mark and have its Affiliates mark all patented Products they sell or distribute pursuant to this Agreement in accordance with the applicable patent statutes or regulations in the Territory.
- 7.9. **Patent Term Extensions.** The Parties will reasonably discuss patent term adjustment, patent term extension, supplemental patent protection or related extension of rights with respect to ASLAN Patents in the Territory. To the extent permitted by applicable law, ASLAN shall apply for and pursue any such adjustment, extension or protection as directed by BIOGENETICS, at BIOGENETICS' cost.
- 7.10. **Improvements by ASLAN.** If any Improvements are made by ASLAN or its Third Party collaborators during the Licence Period, the Parties acknowledge that ASLAN will own such Improvements and the Intellectual Property therein. ASLAN will promptly disclose such Improvements to BIOGENETICS and they will form part of the Licensed Technology licensed hereunder.
- 7.11. **Improvements by BIOGENETICS.** All rights, title and interest in any Improvements made by or on behalf of BIOGENETICS or its Affiliates during the Licence Period shall be owned by ASLAN; and BIOGENETICS hereby assigns all of its rights, title and interest in and to such Improvements to ASLAN and agrees to do all such other acts as appropriate to allow ASLAN to perfect such rights, title and interest. BIOGENETICS will promptly disclose such BIOGENETICS Improvements to ASLAN if they are necessary or useful to the development or Commercialization of Products.

8. WARRANTIES

- 8.1. Each of the Parties warrants that:
- 8.1.1 it has full power and authority to enter into and observe the obligations under this Agreement and, for the avoidance of doubt ASLAN warrants that the Licensed Patents and the Licensed Know-how are either owned or Controlled by it;
 - 8.1.2 to the best of its actual knowledge as at the Effective Date, its entry into and performance under the terms of this Agreement will not infringe the rights of any Third Party or cause it to be in breach of any obligations to a Third Party;
 - 8.1.3 all information, data and materials provided by it to the other pursuant to this Agreement will be, to the best of its knowledge and belief, accurate and complete in all material respects.
- 8.2. ASLAN warrants that, to the best of its actual knowledge as at the Effective Date:

- 8.2.1 the exercise by BIOGENETICS of the licence rights granted to BIOGENETICS under Section 2 does not infringe the rights of any Third Party and any terms and conditions of Almirall Head Licence Agreement;
- 8.2.2 no Third Party has threatened or, so far as it is aware, is currently threatening proceedings in respect of infringement of any the Licensed Patents and the Licensed Know-how, and none of the same is the subject of any actual or, so far as it is aware, threatened challenge, opposition or revocation proceedings.

8.3. Any condition, warranty or other term which is not expressly set out in this Agreement which might otherwise be implied or incorporated into this Agreement, whether by statute, common law or otherwise, is, insofar as it is lawful to do so, hereby excluded.

8.4. **Compliance with Law.** Each Party covenants to the other that it will comply with all applicable laws as amended, in carrying out its obligations pursuant to this Agreement. Each Party covenants to the other that it and any sub-contractor legitimately appointed by it currently holds or at the relevant time will hold any and all consents, approvals, orders or authorizations necessary to comply with its obligations under this Agreement.

8.5. **Disclaimers.** Without prejudice to ASLAN's warranties set out in Sections 8.1 and 8.2, BIOGENETICS acknowledges that ASLAN licences the Licensed Technology "as is", that is, without any warranty of any kind, express or implied, including, without limitation, warranty of its accuracy or completeness, of merchantability, fitness for a particular purpose (including but not limited to manufacture the Product or conduct the development), commercial value, and without any warranty of any kind, express or implied, of the inexistence of adverse effects, of the safety or other quality, efficiency, stability, characteristics or usefulness of, or merchantability, or fitness for a particular purpose of any Product.

9. LIABILITY

9.1. **BIOGENETICS Indemnities.** BIOGENETICS shall indemnify, keep indemnified and hold harmless ASLAN, its Affiliates and their directors, officers and employees ("**ASLAN Indemnitees**") from and against all Liabilities incurred in connection with any Third Party claim arising out of or resulting from:

- 9.1.1 breach of any term of this Agreement by BIOGENETICS, or its Affiliates, contractors or sub-licensees;
- 9.1.2 the negligence, recklessness or wilful misconduct of BIOGENETICS, its Affiliates or its contractors or sub-licensees;
- 9.1.3 the Commercialization of Products by BIOGENETICS or its Affiliates, sub-licensees or contractors or any end-use of such Products in a manner and for a purpose authorised by any of them,

except to the extent that the Liabilities arise out of or result from, directly or indirectly, breach of any term of this Agreement, negligence, or wilful misconduct of any ASLAN Indemnitees.

- 9.2. **ASLAN Indemnities.** ASLAN shall indemnify, keep indemnified and hold harmless BIOGENETICS and its Affiliates, directors, officers and employees (“**BIOGENETICS Indemnitees**”) from and against all Liabilities incurred in connection with any Third Party claim arising out of or resulting from:
- 9.2.1 breach of any term of this Agreement by ASLAN, or its Affiliates, contractors or sub-licensees;
 - 9.2.2 the negligence, recklessness or wilful misconduct of ASLAN or its Affiliates or contractors in the performance of its obligations under this Agreement,
- except to the extent that the Liabilities arise out of or result from, directly or indirectly, breach of any term of this Agreement, negligence, or wilful misconduct of any BIOGENETICS Indemnitees.
- 9.3. It is a condition of indemnification under this Agreement that:
- 9.3.1 the indemnified Party gives written notice to the indemnifying Party of the Claim in respect of which indemnification is sought promptly on becoming aware of it and does not at any time admit liability or otherwise attempt to settle or compromise such Claim without the indemnifying Party’s prior written consent;
 - 9.3.2 the indemnifying Party shall, at its cost, have sole conduct of the defence or compromise of any such Claim and as between the indemnifying Party and the indemnified Party shall have the sole right to any costs and damages awarded as a result of any such Claim; and
 - 9.3.3 the indemnified Party provides the indemnifying Party such assistance and co-operation as it shall reasonably require, at the indemnifying Party’s reasonable cost, in respect of the conduct of such defence or compromise.
- 9.4. **Insurance.** During the Licence Period, each Party, at its own expense, shall maintain product liability and other appropriate insurance or self-insure in an amount consistent with industry standards to a reasonably adequate level, and upon request each Party shall provide proof of such coverage to the other Party.
- 9.5. **Excluded Liabilities.** Subject to this Section 9.5, the Parties agree that with respect to any claim by one Party against the other arising out of the performance or failure of performance of the other Party under this Agreement, a Party shall be liable to the other Party for direct damages only and shall not be liable for any indirect or consequential loss or damage whatsoever arising under or in relation to the Agreement whether arising from breach of contract (including under any indemnity), misrepresentation (whether tortious or statutory), tort (including negligence), breach of statutory duty, strict liability including but not limited to loss of profits, loss of business, loss of goodwill or similar loss, regardless of whether arising from warranty, strict liability or otherwise or any other legal theory howsoever arising, even if that Party was aware of the possibility that such loss or damage might be incurred by the other, except as a result of a Party’s wilful misconduct. Nothing in this Section 9.5 is intended to limit or restrict the rights or obligations of either Party under Section 8 [Warranties] or to limit a Party’s liability in respect of wilful misconduct.

10. **CONFIDENTIALITY**

10.1. **Confidentiality; Exceptions.** In this Agreement, “Confidential Information” means any information and materials disclosed or made available to one Party by or on behalf of the other Party in connection with this Agreement, whether disclosed in writing, orally or by any other means and regardless of the date it was disclosed, except to the extent that it can be established by the receiving Party that such Confidential Information:

- 10.1.1 is in the lawful knowledge or possession of the receiving Party prior to the time it was disclosed to, or learned by, the receiving Party;
- 10.1.2 is developed independently by the receiving Party by an employee with no knowledge of the disclosure;
- 10.1.3 was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving Party;
- 10.1.4 became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving Party in breach of this Agreement; or
- 10.1.5 is disclosed to the receiving Party, other than under an obligation of confidentiality, by a Third Party who has the lawful power to disclose such information to the receiving Party.

Confidential Information shall be deemed to include the terms of this Agreement.

10.2. **Authorized Use and Disclosure.** Except as expressly provided otherwise in this Agreement or on receiving the prior written consent of the other Party, each Party:

- 10.2.1 must keep the Confidential Information of the other Party confidential;
- 10.2.2 must not use any Confidential Information of the other Party except as reasonably necessary in carrying out its obligations, or exercising its rights, under this Agreement (“**Permitted Purpose**”);
- 10.2.3 may only disclose any Confidential Information of the other Party as follows:
 - (i) to its Affiliates, directors, employees, permitted sub- licensees, consultants and advisors (and the directors, employees, consultants and advisors of its Affiliates) (“**Representatives**”) to the extent necessary for the Permitted Purpose provided that the Party must ensure that any such Representative complies with the obligations of confidence and non-use set out in this Agreement;
 - (ii) the terms of this Agreement may be disclosed to its legal and financial advisors, who must be bound by similar obligations of confidentiality as contained in this Agreement;
 - (iii) if required to be disclosed to a competent authority in accordance with applicable laws, regulations or stock exchange rules (as applicable), in which case the disclosing Party shall promptly notify the other Party of such disclosure requirement to enable the other Party to seek a protective order or other form of confidential treatment for the Confidential Information, and shall thereafter disclose only that portion of the Confidential Information which is required to be disclosed in order to comply;

- (iv) with ASLAN's prior written consent (not to be unreasonably withheld), BIOGENETICS may disclose ASLAN's Confidential Information to potential investors, or acquirers, on a need to know basis, and who must be bound by similar obligations of confidentiality as contained in this Agreement;
- (v) BIOGENETICS may disclose IP of ASLAN to the extent such disclosure is reasonably necessary in prosecuting or defending litigation, or conducting preclinical or clinical trials.

10.3. **Term of confidentiality.** The obligations of confidentiality set out in this Section 10 apply from the Effective Date until five (5) years after the expiration or termination of this Agreement.

10.4. **Specific enforcement.** Each Party acknowledges that:

- 10.4.1 the value of the other Party's Confidential Information, which includes any jointly owned Confidential Information, is unique and difficult to assess in monetary terms;
- 10.4.2 a breach by it of any of its obligations of confidentiality under this Agreement may irreparably harm the Party disclosing such Confidential Information, and damages may not be an adequate remedy for any such breach; and
- 10.4.3 therefore, if it actually breaches or threatens to breach the confidentiality obligations set forth in this Agreement, the Party whose Confidential Information is the subject of such breach, or who is affected by such breach, may seek to enforce this Agreement by way of injunctive relief or specific performance as a remedy (in addition to any other available relief) without proof of actual or special damage.

10.5. **Publications.** ASLAN and BIOGENETICS agree not to issue any press releases or public announcements concerning the terms of this Agreement if the other Party (or its Affiliates or products) is named therein (directly or by referencing items such as logotypes, corporate image, commercial brands, or trademarks) or such release or announcement discloses Confidential Information of the other Party or discloses information which will or may (assessed reasonably) cause harm to the commercial value or reputation of the other's products containing ASLAN003 (and to ensure that their respective Affiliates do not do so) without the prior written consent of the other Party, subject to Section 10.2.3 (iii). The Party interested in issuing the publication shall submit the proposal to the other Party, who shall have at least seven (7) Business Days for review, except as required by a governmental authority and applicable Law, including disclosure required by any securities exchange; provided that following agreement upon the content of such disclosure, subsequent releases which do not materially depart from such agreed content may be made without prior written consent from the other Party.

11. TERM AND TERMINATION

11.1. **Term.** This Agreement shall become effective as of the Effective Date and, unless earlier terminated under this Agreement, shall continue in full force and effect until the expiry of the Licence Period, subject to Section 11.2.

- 11.2. **Automatic Renewal For One Further Year.** If either Party wishes this Agreement to expire without automatic renewal for a further year, then it must serve notice on the other to that effect at least ninety (90) days before expiry of the Licence Period. In the absence of such notice, then this Agreement shall automatically renew for one (1) further year at which point it shall definitively expire unless the Parties mutually agree in writing otherwise.
- 11.3. **Termination For Breach.** Either Party may terminate this Agreement in the event the other Party shall have breached or defaulted in the performance of any of its material obligations hereunder, and such default shall have continued for ninety (90) days after written notice thereof was provided to the breaching Party by the non-breaching Party. Any termination shall become effective at the end of such ninety (90) day period unless the breaching Party (or any other Party on its behalf) has cured any such breach or default prior to the expiration of the ninety (90) day period.
- 11.4. **Termination For Material Safety Risk.** Either Party may terminate the Agreement at any time in the event of a Material Safety Risk associated with the Product.
- 11.5. **Termination on Insolvency.** Either Party may terminate this Agreement by notice, if, at any time, the other Party (i) suspends payment of its debts or is unable to pay its debts as they fall due or admits inability to pay its debts or is deemed unable to pay its debts or (ii) a petition is filed, a notice is given, a resolution is passed, or an order is made, for or in connection with the winding up of that Party (other than for the sole purpose of a scheme for a solvent amalgamation of that Party with one or more other companies or the solvent reorganisation of that Party); or (iii) an application is made to court, or an order is made, for the appointment of an administrator, or if an administrator is appointed over that Party; or (iv) a receiver is appointed over all or any of the assets of that Party; or (v) any similar insolvency event to any of the foregoing occurs in any jurisdiction; or (vi) that Party suspends or ceases, or threatens to suspend or cease, to carry on all or a substantial part of its business.

12. **EFFECT OF TERMINATION.**

- 12.1. **Accrued Rights, Surviving Obligations.** Termination or expiration of the Agreement for any reason shall be without prejudice to any obligations which shall have accrued prior to such termination or expiration, including, without limitation, any and all damages arising from any breach hereunder.
- 12.2. Upon any termination of the Agreement, the licence granted to BIOGENETICS in Section 2.1 shall terminate, except and only for long as needed by BIOGENETICS to meet its obligations under this Section 12.
- 12.3. Upon any termination of the Agreement for any reason:
- a) BIOGENETICS shall promptly assign and transfer to ASLAN all Regulatory Filings with respect to Products in the Territory that are held or Controlled by or under authority of BIOGENETICS or its Affiliates (including Regulatory Filings obtained by permitted sub-licensees to the extent such sub-licensees' sublicense(s) do not survive the

termination of this Agreement), and shall take such actions and execute such other instruments, assignments and documents as may be necessary to effect the transfer of rights under such Regulatory Filings to ASLAN. BIOGENETICS shall cause each of its Affiliates and all such sub-licensees whose sublicense(s) do not survive the termination of this Agreement to transfer any such Regulatory Filings to ASLAN if this Agreement terminates. If applicable laws, rules or regulations prevent or delay the transfer of ownership of a Regulatory Filing to ASLAN, BIOGENETICS shall grant, and does hereby grant, to ASLAN an exclusive and irrevocable right of access and reference to such Regulatory Filing for the Product(s), and shall cooperate fully to make the benefits of such Regulatory Filings available to ASLAN and/or its designee(s). Within ninety (90) days after notice of such termination, BIOGENETICS shall provide to ASLAN copies of all such Regulatory Filings, and of all preclinical and clinical data (including raw data, original records, investigator reports, both preliminary and final, statistical analyses, expert opinions and reports, safety and other electronic databases) and other Know-How information pertaining to the Product, or the manufacture thereof. ASLAN shall be free to use and disclose such Regulatory Filings and other items in connection with the exercise of its rights and licences under this Section 12.3.

- b) BIOGENETICS shall grant, and hereby does grant, effective upon the effective date of such termination: (i) an exclusive, worldwide, irrevocable, fully paid-up licence to ASLAN to make, use, sell, offer for sale or import Product(s), under any patent rights owned or Controlled by BIOGENETICS or its Affiliates that: (A) were generated by BIOGENETICS or its Affiliates in connection with the Development or Commercialization of the Product(s) prior to the effective date of such termination, or (B) were otherwise utilized by BIOGENETICS, its Affiliates or permitted sub-licensees in the Development or Commercialization of the Product(s); and (ii) a non-exclusive, worldwide, fully-paid licence to ASLAN under any know-How that: (A) were generated by BIOGENETICS or, its Affiliates in connection with the development or Commercialization of the Product(s) prior to the effective date of such termination, or (B) were otherwise utilized by BIOGENETICS, its Affiliates or such sub-licensees in the development or Commercialization of the Product(s), in case under the preceding sub-clauses (i) and (ii) solely to the extent reasonably necessary for ASLAN to make, use, sell, offer for sale or import Product(s) in the Field; provided, however, if any such patent rights or other Intellectual Property licensed to ASLAN hereunder is subject to payment obligations to a Third Party, BIOGENETICS shall promptly disclose such obligations to ASLAN in writing and such patent rights or other Intellectual Property shall be deemed to be Controlled by BIOGENETICS only if ASLAN agrees in writing to reimburse all amounts owed to such Third Party as a result of ASLAN's exercise of such licence.
- c) BIOGENETICS shall cause to be assigned, and hereby does assign, to ASLAN all rights in and to any and all trademarks used in connection with the Commercialization of the Product by BIOGENETICS or its Affiliates. It is understood that such assignment shall not include the name or trademark for BIOGENETICS' company itself.
- d) If there are any ongoing clinical trials with respect to the Product being conducted by or on behalf of BIOGENETICS, its Affiliates at the time of notice of termination,

BIOGENETICS agrees to (i) promptly transition to ASLAN or its designee all of such clinical trials and the activities related to or (ii) terminate such clinical trials; in each case as requested by ASLAN and subject to compliance with applicable laws, rules and regulations.

- 12.4. For a) through d) in Section 12.3 above, ASLAN shall be responsible for the reasonable costs of such transition except in the case of a termination of this Agreement by ASLAN pursuant to Section 11.3 or 11.5, in which case BIOGENETICS shall be responsible for such costs.
- 12.5. (a) If requested by ASLAN, BIOGENETICS or its Affiliates shall continue to distribute and sell the Products in the Territory, in accordance with the terms and conditions of this Agreement, for a period requested by ASLAN not to exceed six (6) months following the effective date of termination (“**Commercialization Wind-Down Period**”) provided that ASLAN may terminate this Commercialization Wind-Down Period upon thirty (30) days’ notice to BIOGENETICS. Notwithstanding any other provision of this Agreement, during this Commercialization Wind-Down Period, BIOGENETICS’ and its Affiliates’ rights with respect to the Products (including the licences granted under Section 2.1) shall be non-exclusive, and ASLAN shall have the right to engage one or more other partner(s) or distributor(s) of the Products in all or part of the Territory. The Products sold or disposed by BIOGENETICS or its Affiliates during this Commercialization Wind-Down Period shall be subject to royalties under Section 5.4 above. After the Commercialization Wind-Down Period, BIOGENETICS, and its Affiliates shall not sell the Products or make any representation that, or implying that, they are a continuing licensee of or distributor for ASLAN for the Products.
- (b) If ASLAN wishes BIOGENETICS or its Affiliates terminate to distribute and sell the Products in the Territory without the Wind-Down Period mentioned above, ASLAN or its designee(s) shall purchase all quantities of the Product in BIOGENETICS’ or its Affiliates’ inventory at the price BIOGENETICS actually incurred to purchase the quantities so provided to ASLAN within thirty (30) days after the effective date of termination.
- 12.6. BIOGENETICS agrees to fully cooperate with ASLAN and its designee(s) to facilitate a smooth, orderly and prompt transition of the development and Commercialization of Products to ASLAN and/or its designee(s) during the Commercialization Wind-Down Period. Without limiting the foregoing BIOGENETICS shall, subject to applicable data privacy laws and its relevant contractual confidentiality obligations to Third Parties, promptly provide ASLAN (i) copies of customer lists, customer data and other customer information relating to the Products and (ii) (if applicable) manufacturing information (including protocols for the production, packaging, testing and other manufacturing activities) relating to the Product in BIOGENETICS’ Control, which in each case ASLAN shall have the right to use and disclose for any purpose during this Commercialization Wind-Down Period and thereafter. Upon request by ASLAN, BIOGENETICS shall transfer to ASLAN all quantities of the Product in its or its Affiliates’ Control (as requested by ASLAN), within thirty (30) days after the end of this Commercialization Wind-Down Period; provided, however, that ASLAN shall reimburse BIOGENETICS for the costs that BIOGENETICS actually incurred to manufacture or purchase the quantities so provided

to ASLAN, which in the case BIOGENETICS has manufactured such quantities of Product itself, shall be BIOGENETICS' fully-burdened manufacturing cost. If any Product was manufactured by any Third Party for BIOGENETICS, or BIOGENETICS had contracts with vendors which contracts are necessary or reasonably useful for ASLAN to take over responsibility for the Product in the Territory, then BIOGENETICS shall cooperate to the extent reasonably possible and requested in writing by ASLAN, to assign all of the relevant Third-Party contracts to ASLAN, and in any case, BIOGENETICS agrees to cooperate with ASLAN to ensure uninterrupted supply of the Products. ASLAN shall be responsible for the reasonable costs of such assignment except in the case of a termination of this Agreement by ASLAN pursuant to Section 11.3 or 11.5, in which case BIOGENETICS shall be responsible for such costs. If BIOGENETICS or its Affiliate manufactured any Product at the time of termination, then BIOGENETICS (or its Affiliate) shall continue to provide for manufacturing of such Product for ASLAN, at its fully-burdened manufacturing costs therefor, from the date of notice of such termination until such time as ASLAN is able, using diligent efforts to do so but no longer than the expiration of the Commercialization Wind-Down Period, to secure an acceptable alternative commercial manufacturing source from which sufficient quantities of the Product may be procured and legally sold in the Territory.

12.7. Survival. Sections 5, 6, 7.11, 9, 10, 12 and 13.11 of this Agreement shall survive expiration or termination of this Agreement for any reason. With respect to any termination or expiration of this Agreement, all rights and obligations of the Parties under this Agreement shall terminate upon such expiration or termination, except to the extent otherwise provided in this Article 12.

12.8. Termination is not the sole remedy under this Agreement and, whether or not termination is effected, all other remedies will remain available except as agreed to otherwise herein.

13. GENERAL

13.1. **Assignment.** This Agreement shall not be assignable by either Party to any Third Party hereto without the written consent of the other Party hereto, not to be unreasonably withheld or delayed except to the extent provided in Section 2.5 under this Agreement. If any permitted assignment would result in withholding or other similar taxes becoming due on payments from the assigning Party to the other Party under this Agreement, the assigning Party shall be responsible for all such taxes resulting from such assignment, and the amount of such taxes shall not be withheld or otherwise deducted from any amounts payable to other Party. No assignment and transfer shall be valid and effective unless and until the assignee/transferee agrees in writing to be bound by the provisions of this Agreement. The terms and conditions shall be binding on and inure to the benefit of the permitted successors and assigns of the Parties.

13.2. **Independent status of the Parties.** The Parties to this Agreement are independent contractors and agree that the relationship between the Parties shall not constitute a partnership, joint venture or agency. No Party shall have the authority to make any statement, representation or commitment of any kind, or to take any action, which shall be binding on the other Party, without the prior written consent of the other Party.

- 13.3. **Waiver.** No delay or omission by a Party in exercising or availing itself of any right, power or privilege hereunder shall preclude the later exercise of any such right, power or privilege by such Party. No waiver shall be effective unless made in writing with specific reference to the relevant provision(s) of this Agreement and signed by a duly authorized representative of the Party granting the waiver. Waiver by a Party of a breach hereunder by the other Party shall not be construed as a waiver of any succeeding breach of the same or any other provision.
- 13.4. **Force majeure.** Neither Party shall be deemed to be in breach of this Agreement or otherwise liable to the other by reasons of any delay in performance or non-performance of any of its obligations under this Agreement, to the extent that such delay or non-performance is due to any event of force majeure, including without limitation any wars, insurrections, strikes, acts of God, Governmental actions or controls or any other contingency beyond its control. The Party whose performance of obligations has been delayed by force majeure shall use its best efforts to overcome the effect of the force majeure event as soon as possible. The Party affected by the force majeure shall notify immediately to the other Party the existence of the force majeure. The other Party shall have no right to demand indemnity or damages as a result of the force majeure event. If the event of force majeure preventing performance continues for more than six (6) months from the date of notice given pursuant thereto and such suspension of performance would otherwise constitute a material breach under this Agreement, the non-force majeure Party may terminate this Agreement, by giving written notice of termination to the other without liability to any of the Parties, except the obligation to make any payments due up to such date under this Agreement. Termination under this Section 13.4 shall be considered as termination under Section 11.3 provided that no Party shall be entitled to damages or any other legal remedy in connection therewith.
- 13.5. **Entire Agreement.** This Agreement embodies all of the understandings and obligations between the Parties with respect to the subject matter hereof, and supersedes, replaces and cancels all prior agreements or understandings between the Parties with respect to the same.
- 13.6. **Amendments.** No amendments to this Agreement shall be valid unless executed in writing duly authorized signatories of both Parties.
- 13.7. **Notices.** All notices, instructions and other communications hereunder or in connection herewith shall be in writing, shall be sent to the address of the relevant Party set forth below and shall be (a) delivered personally, (b) sent via a reputable international overnight courier service, or (c) sent by facsimile transmission with confirmation by overnight courier. Any such notice, instruction or communication shall be deemed to be delivered by the sending Party in the case of (a) actual receipt, (b) signature of the receipt by the receiving Party and (c) issuance of electronic confirmation of receipt, if transmitted by facsimile (if such transmission is on a Business Day, or otherwise, on the next Business Day following such transmission). Either Party may change its address by giving notice to the other Party in the manner provided above. All notices shall be in English language. Additionally, all information, documents and reports which ASLAN is required to provide or send to BIOGENETICS under this Agreement, and which are not originally in English, shall be sent together with their applicable translation into English.

(a) If to ASLAN:
ASLAN Pharmaceuticals Pte Limited
83 Clemenceau Avenue
#12-03 UE Square
Singapore 239920
Attention: General Counsel
Fax No.: +65 6225 2419

(b) If to BIOGENETICS:
BIOGENETICS CO., LTD
11th Liveplex Tower,
702 Eonju-ro,
Seoul,
Republic of Korea
Attention: Joocheon Ahn / CEO
Fax No.: + 82 2 2622 7799

- 13.8. **Severability.** In the event any portion of this Agreement shall be held illegal, void or ineffective, the remaining portion hereof shall remain in full force and effect and shall not be affected. If any of the terms or provisions of this Agreement are in conflict with any applicable statute or rule of law, then such terms or provisions shall be deemed inoperative to the extent they may conflict therewith and shall be deemed to be modified to conform to such statute or rule of law. However, in case such invalidation or unenforceability injures the rights and interests of either Party, the Parties hereto shall renegotiate the corresponding provisions of this Agreement in good faith.
- 13.9. **Third-Party beneficiaries.** None of the provisions of this Agreement shall be for the benefit of or enforceable by any Third Party including, without limitation, any creditor of any Party hereto. No such Third Party shall obtain any right under any provision of this Agreement or shall by reason of any such provision make any claim in respect of any debt, liability or obligation (or otherwise) against any Party hereto.
- 13.10. **Governing Law.** This Agreement and any dispute arising from the performance or breach hereof shall be governed, construed and enforced in accordance with the laws of Singapore, without regard or giving effect to the conflicts of law principles thereof. The Parties expressly exclude application of the United Nations Convention for the International Sale of Goods.
- 13.11. **Dispute Resolution.**
- (a) **Internal Resolution.** Except as otherwise expressly provided herein, in the event of any controversy, claim or other dispute arising out of or relating to any provision of this Agreement or the interpretation, enforceability, performance, breach, termination or validity hereof (a "Dispute"), such Dispute shall be first referred to the Chief Executive Officer (CEO) of each Party or the Person that each of them may delegate (such delegate being a senior director or above), for resolution, prior to proceeding under the following provisions of this Section. For the avoidance of doubt, this internal resolution proceeding shall not and cannot be used by any of the Parties as a way to

modify the rights and obligations under the Agreement or as a way to modify the agreements already reached by the Parties as they have been reflected in the Agreement. Any Parties' resolution under this proceeding shall be resolved in accordance with the terms and conditions of the Agreement and the rights and obligations of the Parties as they are currently reflected in the Agreement. This internal resolution proceeding will be used as the last resort for the Parties to avoid to enter into a dispute to be resolved by the arbitration proceeding below. A Dispute shall be referred to such executives upon any Party providing the other Party with written notice that such Dispute exists, and such executives, or their designees, shall attempt to resolve such Dispute through good faith discussions, each Party acting reasonably, within sixty (60) Business Days of being referred to such executives.

- (b) **Arbitration.** Except as otherwise agreed in writing, the Parties agree that any Dispute over any matter which has not been resolved following the procedures set out in Section 13.11(a) must be finally resolved through a binding arbitration which the Parties agree to accept in lieu of litigation or other legally available remedies (except for injunctive relief where such relief is necessary to protect a Party from irreparable harm pending the outcome of the arbitration). Any such arbitration shall be settled in Hong Kong International Arbitration Centre ("HKIAC") in accordance with its Rules of Arbitration by one (1) arbitrator chosen in accordance with said Rules. The arbitration shall be conducted in English and will be held in Hong Kong. The award rendered by HKIAC shall be binding and final upon the Parties.

13.12. **Use of Name.** None of the Parties is entitled to use the corporate or commercial name of the other Party, for any advertisement or promotional purposes without the prior written consent of the other Party.

13.13. **Awareness.** In this Agreement when a Party's liability for a statement is limited by the extent of its 'awareness', this shall be construed to mean a level of awareness assuming reasonable enquiries have been made.

13.14. **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

14. **NEW COMMERCIAL ENTITY**

14.1. The Parties acknowledge that ASLAN and BIOGENETICS may wish in the future to establish a new commercial entity (the "**Commercial JV Co**") intended to promote the introduction and Commercialization of oncology drugs in the Territory.

14.2. If the Commercial JV Co is established, the financial and other terms and conditions set out in this Agreement shall be reviewed and discussed by both parties and revised as mutually agreed. However the Parties agree to negotiate in principle that:

- (a) BIOGENETICS shall own a majority stake in the Commercial JV Co;
(b) ASLAN shall own a minority stake in the Commercial JV Co but shall have board representation; and

- (c) ASLAN shall have a right (but not the obligation) to co-invest at each funding round for the Commercial JV Co at a valuation per share (to be negotiated among ASLAN, BIOGENETICS and where relevant, other investors) applying to other new investors in the Commercial JV in each funding round.

- 14.3. Prior to establishing the Commercial JV, ASLAN and BIOGENETICS shall enter into a separate definitive agreement setting forth among others, the ownership structure described in Section 14.2 above, the rights and obligations of ASLAN and BIOGENETICS and other terms.

15. **BUY-BACK OPTION**

- 15.1. ASLAN reserves the right any time between the Effective Date and the date of first submission of an NDA to the MFDS for Products in the Territory, to revoke the rights granted to BIOGENETICS pursuant to this Agreement without any liability, subject to ASLAN complying with the terms set out below ("**Buy-Back Option**").
- 15.2. ASLAN may exercise the Buy-Back Option by giving thirty (30) days' written notice (or such shorter period as the Parties may agree) to this effect ("**Buy-Back Notice**") to BIOGENETICS. The Buy-Back Notice shall specify: (i) the effective date of the revocation effected by the Buy-Back Option, and (ii) the amount to be paid by ASLAN to BIOGENETICS in accordance with Sections 15.3 or 15.4 (as applicable).
- 15.3. In the event ASLAN has agreed detailed terms with a Third Party for a major international licensing deal for ASLAN003, in respect of which the territories covered by the licence include at least the USA, the European Union and either or both of China or Japan) ("**Global Deal**"), then once the Buy-Back Option has been exercised and the Global Deal has been entered into, ASLAN shall pay to BIOGENETICS the following sums:
- (a) a sum equal to the Total Amount Paid multiplied by a factor of one point two (1.2), the resulting amount payable within thirty (30) days of the BIOGENETICS's invoice for the same; and the "**Total Amount Paid**" shall mean the aggregate of: accumulated Clinical Trial Costs Contributions, plus the Initial Payment pursuant to Section 5.1, plus milestones paid pursuant to Section 5.3, all as actually paid by BIOGENETICS and received by ASLAN, plus sums actually paid by BIOGENETICS in relation to Regulatory Filings, all as shall have occurred between the Effective Date and the date of the Buy-Back Notice; and
 - (b) a sum equal to two per cent (2%) of the upfront payment actually received by ASLAN from the Global Deal ("**the Share of Upfront**"). ASLAN undertakes to inform BIOGENETICS within thirty (30) days of receipt of such upfront payment that it has received the same, providing adequate details for the purposes of this Section, and, upon receiving BIOGENETICS's correct invoice for the Share of Upfront, to pay the Share of Upfront to BIOGENETICS within thirty (30) days; and
 - (c) thereafter, two per cent (2%) of all royalties and sales milestones actually received by ASLAN from the Global Deal.
- 15.4. In the absence of ASLAN agreeing the detailed terms of a Global Deal with a Third Party, then once the Buy-Back Option has been exercised ASLAN shall pay to BIOGENETICS the following sum:
- (a) a sum equal to the Total Amount Paid (as defined in Section 15.3(a)) multiplied by a factor of one point five (1.5), the resulting amount payable within thirty (30) days of the BIOGENETICS's invoice for the same.

- 15.5. Upon exercise by ASLAN of the Buy-Back Option in accordance with Section 15.2, and subject to any Commercialization arrangements with Third Parties entered into with ASLAN's consent and approval: (i) all licences granted to BIOGENETICS under Section 2 shall cease; (ii) BIOGENETICS shall cease all exploitation of the Licensed Technology; (iii) BIOGENETICS shall promptly return to ASLAN, at ASLAN's expense or, if ASLAN so elects, permanently delete, all records and copies (including electronic copies) of the Licensed Technology, of technical material in its possession relating to the Products, and of any information (whether or not technical) of a confidential nature communicated to it by ASLAN, either in contemplation or as a result of this Agreement; and (iv) within ninety (90) days after the date of revocation specified in the Buy-Back Notice BIOGENETICS shall promptly destroy or, if ASLAN shall so elect, deliver to ASLAN or any other person designated by ASLAN, at ASLAN's expense, all Product(s) that BIOGENETICS has not disposed of within 90 days after the date of termination. BIOGENETICS agrees (at ASLAN's cost) to execute such documents and do all such acts and things as ASLAN may deem desirable or necessary pursuant to its exercise of its rights under this Section 15.5.

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals by their duly authorized representatives as of the date and year first above written.

Each person executing this Agreement on behalf of a Party represents and warrants his / her capacity and authority to do so.

ASLAN PHARMACEUTICALS PTE LTD

BIOGENETICS CO., LTD

By: /s/ Carl Firth
Name: Carl Firth
Title: CEO

By: /s/ Joohoon Ahn
Name: Joohoon Ahn
Title: CEO

Date: 11th March 2019

Date: 11th March 2019

[...***...]

Schedule 2

[...***...]

Subsidiaries of ASLAN Pharmaceuticals Limited

Name of Subsidiary	Jurisdiction of Incorporation or Organization
ASLAN Pharmaceuticals Pte. Ltd.*	Singapore
ASLAN Pharmaceuticals Taiwan Limited	Taiwan
(ASLAN PHARMACEUTICALS)***	
ASLAN Pharmaceuticals Pty Ltd**	Australia
ASLAN Pharmaceuticals Hong Kong Limited	Hong Kong
(ASLAN PHARMACEUTICALS)***	
ASLAN Pharmaceuticals (Shanghai) Co. Ltd.	People's Republic of China
(ASLAN PHARMACEUTICALS (SHANGHAI) CO. LTD)***	
ASLAN Pharmaceuticals (USA) Inc.**	United States

* Wholly owned by ASLAN Pharmaceuticals Limited

** Wholly owned by ASLAN Pharmaceuticals Pte. Ltd.

*** Wholly owned by ASLAN Pharmaceuticals Hong Kong Limited

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Carl Firth, certify that:

1. I have reviewed this annual report on Form 20-F of ASLAN Pharmaceuticals Limited;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 29, 2019

By: _____ /s/ Carl Firth, Ph.D.

Carl Firth, Ph.D.
Chief Executive Officer and Chairman
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Kiran Asarpota, certify that:

1. I have reviewed this annual report on Form 20-F of ASLAN Pharmaceuticals Limited;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 29, 2019

By: _____ /s/ Kiran Asarpota

Kiran Asarpota
Vice President of Finance
(Principal Financial Officer and
Principal Accounting Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Carl Firth, Ph.D., Chief Executive Officer and Chairman of ASLAN Pharmaceuticals Limited (the "Company"), hereby certifies that, to the best of his knowledge:

1. The Company's Annual Report on Form 20-F for the year ended December 31, 2018, to which this Certification is attached as Exhibit 13.1 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 29, 2019

By: _____ /s/ Carl Firth, Ph.D.

Carl Firth, Ph.D.
Chief Executive Officer and Chairman
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Kiran Asarpota, Vice President of Finance of ASLAN Pharmaceuticals Limited (the "Company"), hereby certifies that, to the best of his knowledge:

1. The Company's Annual Report on Form 20-F for the year ended December 31, 2018, to which this Certification is attached as Exhibit 13.2 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 29, 2019

By: _____
/s/ Kiran Asarpota
Kiran Asarpota
Vice President of Finance
(Principal Financial Officer and
Principal Accounting Officer)