



ANNUAL REPORT AND FINANCIAL STATEMENTS

for the year ended

31 December 2018

# Adaptimmune Therapeutics plc

Company Number 09338148

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## ADAPT IMMUNE THERAPEUTICS PLC

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ADAPTIMMUNE THERAPEUTICS PLC  
COMPANY INFORMATION

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DIRECTORS	Mr L M Alleva Dr A Behbahani Ms B Duncan Mr J Furey (Appointed 5 July 2018) Mr G Kerr Mr D M Mott Mr J J Noble Dr C E Sigal Dr P A Thompson (Resigned 5 July 2018) Dr T Zaks
SECRETARY	Ms M Henry
COMPANY NUMBER	09338148
REGISTERED OFFICE	60 Jubilee Avenue Milton Park Abingdon Oxfordshire OX14 4RX
AUDITOR	KPMG LLP Arlington Business Park Theale Reading RG7 4SD

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Adaptimmune Therapeutics plc was incorporated on 3 December 2014. The Directors submit this report and the Consolidated Financial Statements of Adaptimmune Therapeutics plc and its subsidiaries, Adaptimmune Limited and Adaptimmune LLC (which may be referred to as “the Group”, “we”, “us” or “our”) as of and for the years ended 31 December 2018 and 2017, as well as the financial statements for Adaptimmune Therapeutics plc (“the Company” or “the parent company”) as of and for the years ended 31 December 2018 and 2017.

Adaptimmune Therapeutics plc is a public company limited by shares and incorporated and domiciled in England and Wales. Adaptimmune Limited is registered in England and Wales. Adaptimmune LLC is registered in the United States of America.

## **BASIS OF PRESENTATION**

Our Directors have elected to prepare the group financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the EU and in compliance with IFRSs issued by the IASB. The parent company financial statements are drawn up in accordance with the Companies Act 2006 and Financial Reporting Standard 101 (“FRS 101”).

## **PRINCIPAL ACTIVITIES**

The principal activity of Adaptimmune Therapeutics plc is the development and commercialisation of T-cell therapy to treat cancer.

We are a clinical-stage biopharmaceutical company focused on providing novel cell therapies to patients, particularly in solid tumours. Our comprehensive and proprietary SPEAR (Specific Peptide Enhanced Affinity Receptor) T-cell platform enables us to identify cancer targets, find and genetically engineer T-cell receptors (“TCRs”), and produce therapeutic candidates for administration to patients. Using our affinity engineered TCRs, we aim to become the first company to have a TCR T-cell approved for a solid tumour indication.

## **RESULTS AND DIVIDENDS**

The result for the year is set out in the Consolidated Income Statement on page 57.

The Directors do not propose a dividend (2017: \$nil).

## **CHARITABLE AND POLITICAL CONTRIBUTIONS**

No charitable contributions were paid during the year (2017: \$nil).

No donations were made during the year to political organisations (2017: \$nil).

## **FINANCIAL INSTRUMENTS**

Please refer to the Financial Risk Management section included in our Strategic Report, beginning on page 10 of this document.

## **STRUCTURE OF THE GROUP'S CAPITAL**

Please refer to note 18 to the financial statements.

## **DIRECTORS**

The following Directors have held office since the dates indicated below.

Mr L M Alleva	(Appointed 5 March 2015 and re-elected 20 June 2018)
Dr A Behbahani	(Appointed 12 February 2015 and re-elected 21 June 2017)
Ms B Duncan	(Appointed 23 June 2016 and re-elected 21 June 2017)
Mr J Furey	(Appointed 5 July 2018)
Mr G Kerr	(Appointed 1 November 2016 and re-elected 21 June 2017)
Mr D M Mott	(Appointed 12 February 2015 and re-elected 20 June 2018)
Mr J J Noble	(Appointed 3 December 2014 and re-elected 16 June 2016)
Dr C E Sigal	(Appointed 12 February 2015 and re-elected 16 June 2016 and 20 June 2018)
Dr P A Thompson	(Appointed 12 February 2015 and re-elected 21 June 2017 and resigned 5 July 2018)
Dr T Zaks	(Appointed 14 November 2016 and re-elected 21 June 2017)

During the year ended 31 December 2018, there were six full meetings of the Board of Directors. All of our then Directors attended a minimum of 75% of the aggregate of the meetings of the Board of Directors and meetings of its committees of which he or she was a member during 2018, with the exception of Dr Zaks who attended 64% of the meetings. Dr Zaks had to give apologies for Board and Remuneration Committee meetings in December 2018, due to a clash with the launch of the IPO of Moderna Inc, of which he is Chief Medical Officer, but he reviewed the Board and Committee papers in advance and provided feedback to the meetings through the chairman. Mr Furey was appointed to the Board of Directors and the Remuneration Committee effective from 5 July 2018 and attended 100% of the meetings of the Board of Directors and of the Remuneration Committee from his appointment date through to the end of 2018. Effective from 5 July 2018, Dr Thompson stepped down as a member of the Board of Directors. During his service as a director in 2018, Dr Thompson attended over 75% of the meetings of the Board of Directors and of the Remuneration Committee prior to 5 July 2018.

One-third of the Directors are subject to retirement by rotation at each Annual General Meeting of shareholders.

## **THIRD PARTY INDEMNITY PROVISION FOR DIRECTORS**

At the time the report is approved, there are no qualifying third party indemnity provisions in place for the benefit of one or more of the Directors.

## **EMPLOYEE INVOLVEMENT**

The Group is committed to the continued development of employee involvement by an effective communications and consultative framework.

## **DISABLED PERSONS**

Applications for employment by disabled persons are always fully considered, bearing in mind the respective aptitudes and abilities of the applicant concerned. In the event of members of staff becoming disabled, every effort is made to ensure that their employment with the Group continues and the appropriate training is arranged. It is the policy of the Group that the training, career development and promotion of a disabled person should, as far as possible, be identical to that of a person who does not suffer from a disability.

## **ENVIRONMENTAL MATTERS**

Please refer to the Environmental Matters section included in our Strategic Report, beginning on page 10 of this document.

## **GOING CONCERN**

Our business activities, together with the factors likely to affect our future development, performance and position, are set out in the Strategic Report on pages 10 to 26.

In determining whether our financial statements can be prepared on a going concern basis, our Directors considered the Group's business activities, together with the factors likely to affect our future development and performance. The review also included our financial position and cash flows.

As of the date of this report, our Directors have a reasonable expectation that we have adequate resources to continue in business for the foreseeable future. Accordingly, the financial statements have been prepared on the going concern basis.

## **AUDITOR**

A resolution to reappoint KPMG LLP will be proposed at the forthcoming Annual General Meeting.

## **STATEMENT AS TO DISCLOSURE OF INFORMATION TO THE AUDITOR**

All Directors in office at the time the report is approved confirm the following:

- (i) so far as each Director is aware, there is no relevant audit information of which the Company's auditors are unaware; and
- (ii) each Director has taken all the steps that he or she ought to have taken in his or her duty as a Director in order to make himself or herself aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

The Directors' Report was approved by the Board on 26 February 2019.

On behalf of the Board



**James J Noble**  
Director

26 February 2019

## INTRODUCTION

Adaptimmune Therapeutics plc (“the Company”) was incorporated on 3 December 2014. Adaptimmune Therapeutics plc on behalf of itself and its subsidiaries, Adaptimmune Limited and Adaptimmune LLC (which may be referred to as “the Group”, “we”, “us” or “our”), is required to produce a strategic report complying with the requirements of the Companies Act 2006 (Strategic Report and Directors’ Report) Regulations 2013 (the “Regulations”).

## OVERVIEW

We are a clinical-stage biopharmaceutical company focused on providing novel cell therapies to patients, particularly in solid tumours. Our comprehensive and proprietary SPEAR (Specific Peptide Enhanced Affinity Receptor) T-cell platform enables us to identify cancer targets, find and genetically engineer T-cell receptors (“TCRs”), and produce therapeutic candidates for administration to patients. Using our affinity engineered TCRs, we aim to become the first company to have a TCR T-cell approved for a solid tumour indication.

We have three SPEAR T-cells in clinical trials, ADP-A2M10 (MAGE-A10), ADP-A2M4 (MAGE-A4) and ADP-A2AFP (AFP). All SPEAR T-cells are currently exhibiting acceptable tolerability profiles with no evidence of off-target toxicities observed.

- Two Phase 1 clinical trials are ongoing with ADP-A2M10. The first clinical trial is in patients with non-small cell lung cancer (“NSCLC”). The second clinical trial is in patients with three tumour types, urothelial, melanoma and head and neck cancers. Both trials have progressed to the expansion phase, with patients being treated with up to 10 billion transduced SPEAR T-cells.
- A Phase 1 clinical trial is ongoing with ADP-A2M4 in bladder, melanoma, head and neck, ovarian, NSCLC, synovial sarcoma, myxoid round cell liposarcoma (“MRCLS”), oesophageal and gastric cancers. This trial is now in the expansion phase with patients being treated with up to 10 billion transduced SPEAR T-cells.
- A Phase 1 clinical trial is ongoing with ADP-A2AFP in patients with hepatocellular carcinoma. The trial is in dose escalation phase with patients receiving a target dose of 1 billion SPEAR T-cells.

A fourth SPEAR T-cell, the NY-ESO SPEAR T-cell was transitioned to GlaxoSmithKline (“GSK”) during 2018 following GSK’s exercise of its option to obtain an exclusive global license to the NY-ESO SPEAR T-cell program in September 2017. GSK has assumed full responsibility for all development, manufacturing and commercialization activities for the NY-ESO SPEAR T-cell including progression of this SPEAR T-cell into further clinical trials.

We have our own manufacturing facility in the United States that routinely manufactures SPEAR T-cells to treat patients across a broad range of solid tumours. We also have dedicated vector manufacturing in the United Kingdom and we anticipate producing our first batch of vector to support pilot clinical trials in 2019 which will enable us to continue to develop enhancements and improvements with the aim of reducing the time taken to manufacture and supply patient product.

We continue to use our SPEAR T-cell platform to identify and validate further cancer targets (including targets which are closely related to a specific disease indication) to which SPEAR T-cells can be directed. We have a number of preclinical programs in progress.

We have a number of next generation and combination strategies designed to further enhance our SPEAR T-cells. In addition to our internal next generation programs we also have collaborations with third parties intended to promote further next generation solutions. These include our collaboration with Universal Cells, Inc. (“Universal Cells”) and our collaboration with Bellicum Pharmaceutical Inc. (“Bellicum”). With Universal Cells, we are looking to develop affinity engineered donor T-cells that are universally applicable to all patients. While these “off-the shelf cells” would be specific for a given Human Leukocyte Antigen (“HLA”) type and target antigen, they would overcome the current limitation of

autologous therapies that need to be manufactured specifically for each patient. The enhanced T-cell technology being developed involves selective engineering of cell surface proteins, without the use of nucleases, to develop T-cell products. If successful, this will enable us to treat patient populations with an off-the-shelf product. Our Bellicum collaboration was announced in December 2016. Under the collaboration, we will evaluate Bellicum's GoTCR technology (inducible MyD88/CD40 co-stimulation, or iMC) with our SPEAR T-cells for the potential to create enhanced T-cell therapeutics.

## **OUR SPEAR T-CELL THERAPIES**

### ***The Immune System and T-cells***

The immune system plays an important role in targeting and destroying cancer cells. Specifically, T-cells, which are a type of white blood cell, and their receptors create a natural system that is designed to scan the body for diseased cells. In general, cells process proteins internally and then convert these proteins into peptide fragments which are then presented on the cell surface by a protein complex called the Human Leukocyte Antigen, or HLA. T-cells naturally scan all other cells in the body for the presence of abnormal peptide fragments, such as those generated from infectious agents. Recognition of this peptide-HLA complex takes place through the TCR expressed on the T-cells. However, binding of naturally occurring TCRs to cancer targets tends to be very poor because cancer proteins appear very similar to naturally occurring proteins on healthy cells and TCRs that recognize what the body sees as "self-proteins" are eliminated during early human development. Even when TCRs recognize cancer cells expressing novel proteins caused by mutations, elements of the immune system, or the cancer itself often suppress the T-cell response.

### ***Target Identification and Validation***

Before developing any engineered T-cell or TCR, it is important to identify and validate a suitable target cancer peptide. The target must be expressed primarily only on the cancer cells of interest and with expression in normal non-cancerous tissue only where a risk to the patient would be deemed acceptable. Careful validation and identification of targets is important to ensuring that any engineered TCR is specific to the targeted cancer and does not bind to the same target on non-cancer cells, or that the TCR does not recognize a similar peptide derived from a protein in normal cells. Our target identification platform is focused on three approaches. First, we are using our platform to validate cancer testis antigens, for example the MAGE-A4 and MAGE-A10 antigens. Second, we are using our platform to identify non-cancer testis antigens which are closely related to a specific disease indication, for example the AFP antigen. Finally, we are identifying targets in the context of different HLA types ensuring a broad patient population for any given target across multiple HLA types.

### ***Affinity Engineering***

Following identification of a suitable target peptide, we identify TCRs that are capable of binding to that target peptide. We then engineer those identified TCRs to enhance and optimize their ability to target and bind to the cancer peptides, thereby enabling a highly targeted immunotherapy. The optimized TCR then undergoes extensive preclinical safety testing prior to administration to patients. Our SPEAR T-cell platform technology enables us to develop a pipeline of targets and TCR therapeutic candidates that we believe may be effective in a variety of cancer types that are unresponsive to currently available and experimental therapies. We have three wholly owned SPEAR T-cells currently in clinical trials (ADP-A2M10, ADP-A2M4 and ADP-A2AFP) and a pipeline of SPEAR T-cells in development, including SPEAR T-cells directed to antigens expressed different HLA-types.

### ***Administration to Patients***

The process for treating a patient with an engineered TCR therapeutic candidate involves extracting the patient's T-cells and then combining the extracted cells with our delivery system containing the gene for our affinity-enhanced TCR, through a process known as transduction. Our delivery system uses a type of self-inactivating (SIN) virus, known as SIN-lentivirus, to transduce the patient's T-cells and is referred to as a lentiviral vector. The transduced T-cells are then expanded and infused into the patient. When these T-cells encounter a recognized HLA-peptide complex, they multiply and initiate the destruction of the targeted cancer cells.



### ***ADP-A2AFP***

We are dosing in a Phase 1, open label, dose escalation study designed to evaluate the safety and anti-tumour activity of ADP-A2AFP in hepatocellular carcinoma (“HCC”). The trial is open in the United States, United Kingdom and Spain. The Phase 1 clinical trial includes a dose escalation to evaluate safety, including dose limiting toxicities (DLTs), followed by expansion of a tolerable dose to further explore safety and potential evidence of anti-tumour activity. The trial is currently enrolling patients within the second dose cohort, with patients receiving target doses of 1 billion cells. There were no DLT events or evidence of off-target toxicity observed in the first dose cohort.

### ***NY-ESO SPEAR T-cell Therapy (transitioned to GSK)***

On 7 September 2017, we announced that GSK had exercised its option under the strategic collaboration and license agreement with GSK (as amended from time to time, the “GSK Collaboration and License Agreement”) to exclusively license the right to research, develop and commercialize the NY-ESO SPEAR T-cell. Further details on exercise of the option can be found in the *Core Alliances and Collaborations* section below. Following exercise of this option by GSK, the NY-ESO SPEAR T-cell program was transitioned to GSK in August 2018 at which point GSK assumed full responsibility for future research, development and potential commercialization of the NY-ESO T-cell therapy (now called GSK 3377794).

GSK nominated a second target program for the PRAME target antigen, which was announced on 9 January 2017. We have since completed all work under this collaboration program. The program led to the development of a final lead candidate SPEAR T-cell directed to a specific peptide from the PRAME antigen. We and GSK agreed that the collaboration should not continue due to the peptide, to which the lead candidate was directed, not reaching GSK criteria.

GSK have now nominated a third target program that will evaluate and develop new SPEAR T-cells. We and GSK are in the process of agreeing a collaboration program for this third target program.

GSK is entitled to nominate two further target programs under the GSK Collaboration and License Agreement, excluding our ongoing wholly-owned development programs.

### ***Preclinical candidates***

We continue to progress development of new SPEAR T-cells directed to new targets and to targets in the context of HLA-types other than HLA-A2.

### ***Next Generation Technology***

We believe that there is potential to enhance the potency and durability of our SPEAR T-cells, for instance by adding additional active proteins by means of the lentiviral delivery system. These enhancements are designed to result in next generation SPEAR T-cells for future clinical programs. We have multiple development programs ongoing both internally and with third party collaborators to develop various enhancements to our SPEAR T-cells. For example, we have development programs for:

- a dominant negative TGF-Beta (‘dnTGFBR2’) SPEAR T-cell designed to block immune suppression by TGFB in certain tumour microenvironments,
- CD8 constructs that aim to promote epitope spreading, anti-tumour memory and tumour inflammation,
- phosphodiesterase constructs designed to enhance T-cell proliferation, and
- inducible IL-7 constructs that aim is to enhance persistence of our SPEAR T-cells.

Preclinical development is ongoing for a number of these programs with the aim of having the first next generation construct ready for IND (Investigational New Drug) submission during the second half of 2019.

### ***Manufacturing Capability***

We have our own SPEAR T-cell manufacturing capability at the Navy Yard in Philadelphia, Pennsylvania. Patient product manufacture for our wholly owned assets has started across a range of solid tumours. The Navy Yard facility is currently capable of manufacturing T-cell product for up to 10 patients a month. This is scalable to 100 patients per month. We have dedicated vector manufacturing in the United Kingdom, with the first production of vector for pilot clinical trials in 2019. Control of our own manufacturing process enables us to improve and further develop our processes for manufacture of our SPEAR T-cells. We continue to work with our third party T-cell supplier to increase capacity for T-cell manufacture and are using a third party vector manufacturer for supply of vectors to support our ongoing clinical trials.

### ***Manufacturing Improvements***

We have the goal of reducing the time between apheresis of a patient and return of affinity enhanced T-cells back to the patient. We have made a number of changes to our current SPEAR T-cell manufacturing process and are continuing to make changes. In particular, we have implemented rapid sterility testing within our Navy Yard facility. We have also developed a suspension vector manufacturing capability with the first production run for early stage clinical trials expected in 2019.

## **COLLABORATIONS AND STRATEGIC ALLIANCES**

We have entered into core alliance or collaboration agreements with GSK (Collaboration and License Agreement), MD Anderson Cancer Center (collaboration designed to expedite the development of T-cell therapies for multiple types of cancer); Universal Cells (collaboration relating to gene editing and HLA-engineering technology); and Bellicum Pharmaceuticals Inc. (Co-Development and Co-Commercialization Agreement).

### ***GSK Collaboration and License Agreement***

We entered into the GSK Collaboration and License Agreement regarding the development, manufacture and commercialisation of TCR therapeutic candidates in May 2014. The collaboration is for up to five programs. The first program was the NY-ESO SPEAR T-cell program, in relation to which GSK has now exercised its option to take an exclusive license. The second program related to development of a SPEAR T-cell to a peptide derived from the PRAME antigen. This program has now completed. We are in the process of agreeing the third target program with GSK.

Under the terms of the GSK Collaboration and License Agreement, the Company may be entitled to:

- development milestones of up to £18 million (\$23 million) per product and HLA-type for the NY-ESO Program and up to £21.5 million (\$27.3 million) per product and HLA-type for other programs (including the third target program);
- regulatory milestones of up to £36 million (\$45.7 million) per product and HLA-type for the NY-ESO program and up to £40 million (\$50.8 million) per product and HLA-type for other programs (including the third target program); and
- commercialization milestones upon the first commercial sale of a product of up to £70.5 million (\$89.5 million) per product and HLA-type for the NY-ESO Program and up to £80 million (\$101.5 million) per product and HLA-type for other programs (including the third target program).

The development and regulatory milestones are per product milestones and are dependent on achievement of certain obligations, the nature of the product being developed, stage of development of product, territory in which an obligation is achieved and type of indication or indications in relation to which the product is being developed. In addition, for any program, multiple products may be developed in the context of different HLA-types. As of 31 December 2018, we had achieved development milestones of \$66.4 million.

For other programs (including the third target program) under the GSK Collaboration and License Agreement, an option fee is also payable of up to £6 million (\$7.6 million) on exercise of the option by GSK, after which GSK is responsible for all development expenses.

For any product that is commercialised by GSK, the Company may receive tiered sales milestones up to £200 million (\$253.8 million) per product and HLA-type and mid-single to low double-digit royalties on worldwide net sales of the applicable product. Royalties are payable while there is a jointly owned or solely owned valid patent claim covering the SPEAR T-cell in the country in which the relevant SPEAR T-cell is being sold and, in each case, for a minimum of 10 years from first commercial sale of the relevant TCR therapeutic. Sales milestones also apply once any TCR therapeutic covered by the GSK Collaboration and License Agreement is on the market.

On 7 September 2017 we announced that GSK had exercised its exclusive option for the NY-ESO SPEAR T-cell program. Transition of the program to GSK occurred during 2018. GSK has now assumed full responsibility for the NY-ESO SPEAR T-cell program including any ongoing clinical trials. As a result of the option exercise, we received £48 million (~\$61 million) from GSK over the course of the transition period. This included development milestones of £18 million (~\$23 million) and an option payment of £30 million (~\$38 million), which also allows GSK to nominate two additional targets following completion of transition. Successful continuation of development and subsequent commercialization of NY-ESO would trigger additional payments for development milestones, tiered sales milestones, and mid-single to low double-digit royalties on worldwide net sales.

Upon nomination of the third target program by GSK, we have granted to GSK an exclusive option to the nominated target which can be exercised up to four months after approval of an IND application in relation to a TCR therapeutic candidate directed against the nominated target. We are responsible for taking the third target program through preclinical testing and up to IND application filing. GSK is responsible for the IND filing itself should the preclinical testing and development be favourable.

Two other targets may be nominated by GSK at specified times under the GSK Collaboration and License Agreement, excluding any wholly-owned research programs already in progress by us. Upon nomination by GSK of any of these two additional targets, we will grant to GSK an exclusive option on each target, which can be exercised up to four months after approval of an IND application in relation to a TCR therapeutic candidate directed against the nominated target. Nomination also triggers the start of a collaboration program to develop the relevant TCR therapeutic candidate directed to the nominated target peptide.

Following exercise of any option (including the options for the NY-ESO SPEAR T-cell and third target programs), we will grant to GSK (and have granted in relation to the NY-ESO SPEAR T-cell) an exclusive worldwide license under intellectual property rights specific to the SPEAR T-cell developed under the relevant collaboration programs. GSK will, at its own expense, be fully responsible for all further development and commercialisation of the relevant T-cell candidates. The licenses do not include a right for GSK to develop alternative affinity-enhanced TCRs using our intellectual property rights or to develop other TCR therapeutic candidates directed to different target peptides. Under the agreement, we are also prohibited from independently developing or commercialising T-cell therapeutics directed at the targets subject to outstanding options granted to GSK.

The GSK Collaboration and License Agreement is effective until all payment obligations expire, including any ongoing royalty payments due in relation to GSK's sale of any covered TCR therapeutic candidates. The agreement can also be terminated on a collaboration program-by-collaboration program basis by GSK for lack of feasibility or inability to meet certain agreed requirements. Both parties have rights to terminate the agreement for material breach upon 60 days' written notice or immediately upon insolvency of the other party. GSK has additional rights to terminate either the agreement or any specific license or collaboration program upon 60 days' written notice to us. Additional payments may be due to us as a result of such termination, and where we continue any development of any TCR therapeutic candidate resulting from a terminated collaboration program, depending on the stage of development, royalties may be payable to GSK at a mid-single-digit percentage rate of net sales. We also have rights to terminate any licence where GSK ceases development or withdraws any licensed SPEAR T-cells in specified circumstances.

## BUSINESS STRATEGY

Our strategic objective is to be a world leader in discovering, developing and commercialising TCR-based T-cell therapies that transform the clinical outcomes of patients with cancer. We have an ambition to have the first TCR T-cell approved for a solid tumour indication. In order to achieve our objectives, we are focused on the following strategies:

**Advance our clinical studies for ADP-A2M10, ADP-A2M4 and ADP-A2AFP.** We have three wholly owned SPEAR T-cells with open INDs covering multiple indications. We plan to advance these wholly owned SPEAR T-cells during 2019 with the aim of providing initial clinical data for ADP-A2M10 and ADP-A2M4 during the first half of 2019. We are working with leading cancer centres including through our strategic alliance agreement with MD Anderson Cancer Center, to advance our SPEAR T-cells through clinical studies.

**Continue to use our SPEAR T-cell platform to generate SPEAR T-cells for cancers with limited existing therapeutic approaches.** We intend to continue to generate new SPEAR T-cells from our fully integrated technology platform, which enables the systematic identification and validation of suitable target peptides, T-cell cloning, engineering of TCRs and preclinical testing processes. We also continue to develop SPEAR T-cells to address targets from different HLA-types.

**Continue to understand, further enhance and improve the effectiveness and persistence of our SPEAR T-cell therapies.** We continue to evaluate and work to understand the mechanism of action of our SPEAR T-cells, in particular the best approaches for further enhancing the effectiveness and persistence of our SPEAR T-cells. We continue to further develop our SPEAR T-cells internally and through multiple collaborations by exploring the addition of other components in our lentiviral vector, which would be expressed in the SPEAR T-cells alongside our engineered TCR.

**Optimise and expand our process development and manufacturing capabilities to maintain our leadership position in the TCR space.** We have a SPEAR T-cell manufacturing facility in the United States and dedicated vector manufacturing capability in the United Kingdom and we anticipated producing our first batch of vector to support pilot clinical trials in 2019. We will continue to expand our SPEAR T-cell and vector manufacturing capability during 2019 including optimisation of the manufacture, supply, associated analytical expertise and quality systems for our SPEAR T-cell therapies. We also continue to work and develop an off-the-shelf product.

**Expand our intellectual property portfolio.** We intend to continue building on our technology platform, comprising intellectual property, proprietary methods and know-how in the field of TCRs and T-cells. These assets form the foundation for our ability to strengthen our product pipeline and to defend and expand our position as a leader in the field of T-cell therapies.

## DEVELOPMENT AND PERFORMANCE DURING THE PERIOD

On 1 January 2018, the Group adopted *International Financial Reporting Standard ("IFRS") 15, Revenue from Contracts with Customers ("IFRS 15")* and *IFRS 9, Financial Instruments ("IFRS 9")*. The comparative financial information for the years ended 31 December 2017 has not been restated and is prepared in accordance with the previous accounting guidance.

### Revenue

Revenue increased by 57% to \$59.5 million for the year ended 31 December 2018 from \$37.8 million for the year ended 31 December 2017. Revenue comprises the following (in thousands):

For the year ended 31 December	2018	2017	Increase/decrease
Development revenue	\$ 20,391	\$ 37,833	\$ (17,442) (46)%
License revenue	39,114	—	39,114 NM
	<u>\$ 59,505</u>	<u>\$ 37,833</u>	<u>\$ 21,672 57 %</u>

Revenue arises from the GSK Collaboration and License Agreement. Development revenue relates to performance under the NY-ESO SPEAR T-cell transition program and the PRAME pre-clinical development program. License revenue relates to NY-ESO License.

Revenue for the year ended 31 December 2018 has been recognized under IFRS 15 which is effective 1 January 2018. Revenue in the ended 31 December 2017 has been recognized under the previous guidance. Development revenue in the year ended 31 December 2018 under the previous guidance would be \$28.7 million and license revenue would be \$39.0 million.

Development revenue for the year ended 31 December 2018 has decreased by 46% compared to the year ended 31 December 2017 due to the NY-ESO program having transferred to GSK on 23 July 2018. The development revenue for the year ended 31 December 2017 benefited from cumulative revenue amortization of \$17.5 million in September 2017 due to a reduction in the estimate of the period over which we would be delivering services to GSK in relation to the NY-ESO SPEAR T-cell development program.

License revenue was \$39.1 million in the year ended 31 December 2018 compared to nil in the year ended 31 December 2017. License revenue was recognized upon commencement of the NY-ESO License which occurred in the third quarter of 2018.

### ***Research and Development Expenses***

Research and development expenses increased by 20% to \$115.2 million for the year ended 31 December 2018 from \$96.4 million for the year ended 31 December 2017.

The increase in our research and development expenses of \$18.8 million for the year ended 31 December 2018 compared to the year ended 31 December 2017 was primarily due to the following:

- an increase of \$13.5 million in salaries, materials, equipment, depreciation of property, plant and equipment and other employee-related costs, primarily due to the increase in the average number of employees engaged in research and development from 260 to 320;
- an increase in operating expenditure of \$2.0 million on our manufacturing capabilities at our U.S. facility in Philadelphia and our facility in Cambridgeshire, UK; and
- an increase of \$3.3 million in share-based compensation expense.

Our subcontracted costs for the year ended 31 December 2018 were \$41.6 million, compared to \$41.5 million in the same period of 2017, of which \$3.6 million related to our NY-ESO SPEAR T-cells, \$23.0 million related to process development for our SPEAR T-cell platform and the remaining \$14.9 million related to our wholly owned pipeline, including ADP-A2M10, ADP-A2A4 and ADP-A2AFP.

### ***Administrative Expenses***

General and administrative expenses increased by 60% to \$48.3 million for the year ended 31 December 2018 from \$30.2 million in the same period in 2017.

The net increase of \$18.1 million was primarily due to a \$7.1 million increase in personnel costs and share-based compensation expense, due to the addition of key management and other professionals to support our growth, a \$3.3 million increase in realized foreign exchange losses due to foreign exchange movements, a \$2.7 million increase in costs associated with supporting and maintaining our IT infrastructure, a \$0.9 million increase in legal, accounting and professional fees and a \$0.7 million increase in depreciation and amortization.

### ***Other Income***

Other income primarily relates to reimbursements of expenses, primarily through the U.K. Research and Development Expenditure Credit. Other income decreased by 13% to \$1.4 million for the year ended 31 December 2018 from \$1.6 million in the year ended 31 December 2017.

### ***Finance Income***

Finance income decreased by \$4.5 million to \$2.8 million in the year ended 31 December 2018 from \$7.3 million in the year ended 31 December 2017. Finance income comprises interest received and net unrealized foreign exchange gains. The movement in finance income is due to net unrealized foreign exchange gains arising in the year ended 31 December 2017 compared to net unrealized foreign exchange losses in the year ended 31 December 2018, which are classified within finance expenses.

### ***Finance Expense***

Finance expense increased by \$7.5 million to \$8.0 million in the year ended 31 December 2018 from \$0.5 million in the year ended 31 December 2017. Finance expense comprises net unrealized foreign exchange losses. The movement in finance expense is due to net unrealized foreign exchange losses in the year ended 31 December 2018 due to movements in foreign exchange rates.

### ***Taxation credit***

The taxation credit primarily relates to tax credits received under the U.K. Research and Development Scheme for small and medium sized entities offset by income taxes arising in the U.S. tax jurisdiction. Taxation credit increased by \$7.1 million to \$16.2 million for the year ended 31 December 2018 from \$9.1 million for the year ended 31 December 2017 due to an increase in expenses eligible for the tax credit.

## **POSITION OF GROUP AT YEAR END**

### ***Liquidity and Capital Resources***

Since our inception, we have incurred significant net losses and negative cash flows from operations. We financed our operations primarily through sales of equity securities, cash receipts under our GSK Collaboration and License Agreement, government grants and research and development tax and expenditure credits. From inception through to 31 December 2018, we have raised:

- \$513.5 million, net of issue costs;
- \$148.3 million upfront fees, milestones and exercise fees under our GSK Collaboration and License Agreement;
- \$2.8 million of income in the form of government grants; and
- \$24.6 million in the form of U.K. research and development tax credits and receipts from the U.K. RDEC Scheme.

We use a non-GAAP measure, Total Liquidity, which is defined as the total of cash and cash equivalents, short-term deposits and marketable securities, to evaluate the funds available to us in the near-term. A description of Total Liquidity and reconciliation to cash and cash equivalents, the most directly comparable IFRS measure, are provided below under “Non-GAAP measures”.

As of 31 December 2018, we had cash and cash equivalents of \$68.4 million and Total Liquidity of \$205.1 million. We believe that our Total Liquidity will be sufficient to fund our operations, based upon our currently anticipated research and development activities and planned capital spending, through to late 2020.

## **SUMMARY OF CASH FLOWS**

### ***Operating Activities***

Net cash used in operating activities increased by \$50.8 million to \$104.2 million for the year ended 31 December 2018 from \$53.4 million for the year ended 31 December 2017. Net cash used in operating activities is significantly impacted by the timing of milestone payments received from GSK under the GSK Collaboration and License Agreement. In the year ended December 31, 2018, we received \$30.2 million of milestone payments from GSK compared to \$38.2 million in the year ended December 31, 2017. After taking into account the GSK milestone payments and the associated VAT, the increase in cash used in operations was primarily the result of an increase in research and development costs due to the ongoing advancement of our preclinical programmes and clinical trials and an increase in general and administrative expenses. Net cash used in operating activities of \$104.2 million for the year ended 31 December 2018 comprised a loss before tax of \$107.7 million and changes in operating assets and liabilities of \$39.6 million offset by noncash items of \$29.5 million, net taxes received of \$10.5 million and bank interest received of \$3.1 million. The noncash items consisted primarily depreciation expense on plant and equipment of \$7.2 million, equity-settled share-based compensation expense of \$15.9 million, unrealized foreign exchange losses of \$6.2 million and realized losses on maturity or redemption of financial assets at fair value through OCI (2017: available-for-sale financial assets) of \$2.5 million, partially offset by bank interest income of \$2.8 million.

### ***Investing Activities***

Net cash from investing activities was a cash outflow of \$17.6 million and \$127.0 million for the years ended 31 December 2018 and 2017, respectively. These amounts included purchases of property and equipment of \$3.9 million and \$24.6 million for the years ended 31 December 2018 and 2017, respectively, and acquisition of intangibles of \$0.9 million and \$1.3 million for the years ended 31 December 2018 and 2017, respectively. The purchases of property, plant and equipment for the year ended 31 December 2017 and related predominantly to the expansion of our laboratory facilities in the United Kingdom and the United States.

The net cash used in investing activities also included:

- investment in short-term deposits with maturities greater than three months but less than 12 months of \$18.0 million for the year ended 31 December 2017; and
- investment in marketable securities with maturities greater than three months but less than 12 months of \$150.8 million and \$153.3 million in the year ended 31 December 2018 and 2017, respectively;

offset by

- cash inflows from maturity of short-term deposits of \$40.6 million in the year ended 31 December 2017; and
- cash inflows from maturity or redemption of marketable securities with maturities greater than three months but less than 12 months of \$138.0 million and \$29.1 million in the year ended 31 December 2018 and 2017, respectively.

### ***Financing Activities***

Net cash provided by financing activities was \$102.7 million and \$103.6 million for the years ended 31 December 2018 and 2017, respectively.

Net cash provided by financing activities for the year ended 31 December 2018 consisted of \$99.7 million net of issuance costs of \$0.3 million raised through a registered direct offering in September 2018 and proceeds from exercise of share options of \$3.0 million.

Net cash provided by financing activities for the year ended 31 December 2017 consisted of \$61.4 million net of issuance costs of \$4.5 million raised through a follow-on public offering in March 2017, \$41.8 million net of issuance costs of \$0.2 million raised through a registered direct offering in April 2017 and proceeds from exercise of share options of \$401,000.

## KEY PERFORMANCE INDICATORS

Total Liquidity (a non-GAAP financial measure) is the total of cash and cash equivalents, short-term deposits and marketable securities. Each of these components appears in the consolidated balance sheet. The IFRS financial measure most directly comparable to Total Liquidity is cash and cash equivalents as reported in the consolidated financial statements, which reconciles to Total Liquidity as follows (in thousands):

<i>As of 31 December</i>	<b>2018</b>	<b>2017</b>
Cash and cash equivalents	\$ 68,379	\$ 84,043
Marketable securities	136,755	124,218
<b>Total Liquidity</b>	<b>\$ 205,134</b>	<b>\$ 208,261</b>

We believe that the presentation of Total Liquidity provides useful information to investors because management reviews Total Liquidity as part of its management of overall liquidity, financial flexibility, capital structure and leverage. The definition of Total Liquidity includes marketable securities, which are highly-liquid and available to use in our current operations.

## PRINCIPAL RISKS AND UNCERTAINTIES

### *Financial*

We are a clinical-stage biopharmaceutical company with no products approved for commercial sale. We have not generated any revenue from any product sales or royalties. We have a history of losses and anticipate that we will incur continued losses for at least the next few years. We cannot be certain that we will achieve or sustain profitability and it is very difficult to predict any future financial performance. Our resources will continue to be devoted substantially to research and development for the foreseeable future and our ability to generate any revenue from any of our current therapeutic candidates cannot be guaranteed. We cannot be certain that additional funding will be available on acceptable terms, or at all. There is a risk that should we fail to obtain additional funding on the terms or timescales we require, we will be unable to complete the further development of our therapeutic candidates necessary to take those candidates to market.

Our current cash projections include reliance on our ability to obtain certain tax credits and our ability to obtain or continue to obtain such tax credits cannot be guaranteed.

### *Dependence on Clinical Candidates*

Our business is dependent on a small number of clinical candidates. There is no certainty that the results obtained in clinical trials of our existing clinical candidates will be sufficient to enable progression of those candidates through our clinical programmes or the obtaining of regulatory approval or marketing authorisation. There can also be no guarantee that clinical candidates will progress through clinical programmes within anticipated timescales or that we will be able to recruit sufficient clinical trial subjects at all or within anticipated timescales. There is significant competition from third party trials in relation to the recruitment of patients. The outcome of clinical trials is inherently uncertain. Negative results seen in clinical programmes with one clinical candidate may impact on our other clinical programmes or prevent other clinical programmes from starting. T-cell therapy is a novel approach for cancer treatment which is not completely understood and the impact of such therapy cannot be predicted. Our clinical candidates may cause adverse events or fatalities which result in the suspension or halting of clinical programmes.

### ***Research Programmes***

We have a number of pre-clinical and other candidates (including next generation candidates) under development. Development of further candidates and pre-clinical assessment of those candidates takes a substantial amount of time, effort and money and we may encounter significant delays in taking further candidates into clinical programmes or in finding suitable further candidates to further develop.

### ***Manufacturing***

Manufacturing and administration of our SPEAR T-cells is complex and highly regulated. As a result we may encounter difficulties or delays in manufacture of SPEAR T-cells, testing and release of our SPEAR T-cells during or following manufacture, scaling up or further development of any part of our manufacturing process or any associated development activities. Given the complexity of the manufacturing processes, there is a risk that we will not be able to manufacture our SPEAR T-cells reliably or at acceptable costs or on required timescales. Any delays in our manufacture of SPEAR T-cells (whether at our own manufacturing facility or at our third party contract manufacturer's facility) can adversely affect a patient's outcomes and result in delays to our clinical trials. Delays or failures in our manufacturing process can result for a number of different reasons including failure in the process itself, lack of reliability in the process, inaccuracy or failure to produce test results or poor test results, product loss caused by logistical issues, inability to obtain manufacturing slots from our third party contract manufacturers, inability to procure starting materials, close-down of manufacturing facility (whether our own or a third party facility), contamination of starting materials, a requirement to modify or further develop the manufacturing process and supply chain failures or delays. There are additional risks associated with developing a commercially viable process including scaling of our manufacturing process to the levels required and sourcing of materials. Any delay or failure to develop a commercially viable process may delay the progression of our SPEAR T-cells into pivotal trials and our ability to commercialise those SPEAR T-cells.

The manufacture of our existing SPEAR T-cells is heavily reliant on third parties who are outside of our control. A delay or problem with any of our third party contract manufacturers or third party suppliers can result in delays to the overall manufacturing process, an inability to supply our therapeutics to clinical trial sites when required, and increased cost being incurred in the manufacture and supply of our SPEAR T-cells.

Our manufacturing process needs to comply with regulatory requirements in the United States, Canada, UK and certain countries in the European Union. Any failure to comply with the relevant regulatory requirements could result in delays in or termination of our clinical programmes or suspension or withdrawal of regulatory approvals for our SPEAR T-cells or manufacturing process (whether at our own facility or at the facility of any of our third party contract manufacturers).

### ***Commercialisation***

Our ability to commercialise any SPEAR T-cell is dependent on the progression of clinical candidates through regulatory approval processes and on the results seen in clinical trials. Clinical trials are expensive, time-consuming and difficult to implement and there is no guarantee that the results seen in any clinical trials will be sufficient to progress to the next stage of any clinical approval or ultimately to the obtaining of a marketing approval for any of our SPEAR T-cells.

The market opportunities for our SPEAR T-cells may be limited in terms of geographic scope or type of patients which can be treated. Our estimates of the potential patient population which can be treated may be inaccurate affecting the amount of revenue obtainable for any product. Likewise the amount of revenue that can be obtained in relation to any SPEAR T-cell may be impacted by the nature of pricing reimbursement coverage or schemes available or in place in any specific country and the continuation of such coverage and schemes. We currently have no marketing or sales force and we will have to establish a marketing capability prior to bringing any SPEAR T-cell to market. Even if we are successful in obtaining regulatory approval, our candidates may not gain market acceptance or utility.

In addition, we will face increasing competition from third parties as we proceed through clinical programmes, and such third parties may have more funding and resources than us, impacting on our end ability to bring our therapeutic candidates to market.

### ***Regulation***

Our clinical candidates are highly regulated and the regulatory process is lengthy and time-consuming. We may experience significant delays in obtaining regulatory approval or be required to make changes to our clinical programmes or therapeutic candidates by regulatory authorities. Our ability to obtain or maintain accelerated approval or orphan drug designation for any clinical candidate is difficult to predict and may require the development of additional processes or assays. Even if we are successful in obtaining regulatory approvals in one country, this does not mean that we will be successful in other countries and further clinical programmes may be required to obtain required regulatory approvals in such other countries. Should we obtain regulatory approval for any of our SPEAR T-cells we will be subject to ongoing regulatory obligations and requirements which may result in significant additional expense or delays to commercialisation of our products. Any failure to comply with regulatory requirements at any stage in the development of our SPEAR T-cells may harm our reputation and significantly affect our operating results.

We are also subject to regulation as a company both in the United Kingdom and the United States including in relation to financial controls, anti-bribery and other internal policies and controls. If we fail to establish and maintain proper internal controls our ability to comply with applicable regulations could be impaired.

### ***Litigation***

We face an inherent risk of product liability given the nature of our business and will face an even greater risk upon commercialisation of any candidates. We cannot guarantee that any insurance coverage we obtain will be sufficient to cover any product liability that arises. We may also face claims brought by third parties in relation to the way in which we run or manage our business, report the results of our business, or the impact our operations have on such third parties.

### ***Third Parties***

Commercialisation of the NY-ESO SPEAR T-cell therapy and our own ability to commercialise other SPEAR T-cells depends heavily on the ongoing collaboration with GSK and payments made by GSK to us upon achievement of specified milestones. GSK has the right to nominate two further target programs in addition to the NY-ESO SPEAR T-cell, PRAME SPEAR T-cell program and third target programs under the collaboration arrangements. We have no control over whether GSK will elect to progress additional targets under the collaboration arrangements and therefore trigger additional investment from GSK in our SPEAR T-cells.

We also rely heavily on and are dependent on ThermoFisher Scientific Inc. (“ThermoFisher”) and the technology we obtain from them for the activation and expansion of T-cells. Inability to obtain the relevant technology from ThermoFisher would cause delays to our clinical programmes and our ability to manufacture, supply and administer our TCR therapeutic candidates. We also rely heavily on third parties to conduct our clinical trials including universities, medical institutions, Contract Research Organisations (“CROs”) and other clinical supply organisations.

### ***Intellectual Property***

We may be forced to litigate to enforce or defend our intellectual property rights and to protect our trade secrets. We may also not be able to obtain suitable protection for our technology or products, or the cost of doing so may be prohibitive or excessive. We cannot provide any assurance that the intellectual property rights that we own or license provide protection from competitive threats or that we would prevail in any challenge mounted to our intellectual property rights. Third parties may claim that our activities or products infringe upon their intellectual property which will adversely affect our operations and prove costly and time-consuming to defend against. We have licensed, and expect to continue to license, certain intellectual property rights from third parties. We cannot provide any assurances that we will be successful in obtaining and retaining licences or proprietary or patented technologies in the future. Further, our products may infringe the intellectual property rights of others and we may be unable to secure necessary licences to enable us to continue to manufacture or sell our products.

### ***Suppliers***

We depend upon a limited number of suppliers, and certain components or raw materials for our SPEAR T-cells may only be available from a sole source or limited number of suppliers. Even if the key components that we source are available from other parties, the time and effort involved in obtaining any necessary regulatory approvals for substitutes could impede our ability to replace such components timely or at all. The loss of a sole or key supplier would impair our ability to deliver products to our patients or clinical sites in a timely manner, adversely affect our sales and operating results and negatively impact our reputation.

### ***Employees***

We rely on the ongoing involvement of certain key employees. Our ability to further progress our clinical candidates and develop further clinical candidates is dependent on our ability to grow the size and capabilities of our organisation and we may experience difficulties in managing this growth or achieving this growth within anticipated timescales.

### ***Facilities***

If any of our existing facilities or any future facilities, infrastructure or our equipment, including our information technology systems, were damaged or destroyed, or if we experience a significant disruption in our operations for any reason, our ability to continue to operate our business could be materially harmed. For example, if our US facility or infrastructure was damaged or destroyed we may be unable to make certain SPEAR T-cells until an alternative manufacturer has been found. We maintain insurance coverage against damage to our property and equipment and business interruption and research and development.

### ***Brexit***

The United Kingdom is currently negotiating the terms of its exit from the European Union (“Brexit”) scheduled for 29 March 2019. If no agreement can be reached and the U.K. leaves the European Union with no agreement (“hard Brexit”), there will be a period of considerable uncertainty particularly in relation to United Kingdom financial and banking markets, the regulatory process in Europe and movement of goods and people between U.K. and European Union. We may also face new regulatory costs and challenges that could have a material adverse effect on our operations. In the absence of any clear indication that any agreed form of Withdrawal Agreement will contain a contrary requirement, we are already in the process of ensuring that any impact on our operations is limited. In addition, currency exchange rates in the pound sterling and the euro with respect to each other and the U.S. dollar have already been adversely affected by Brexit and could result in volatility in our financial results.

## **FINANCIAL RISK MANAGEMENT**

The Group is exposed to market risks in the ordinary course of our business, which are principally limited to interest rate fluctuations, foreign currency exchange rate fluctuations, particularly between pound sterling and U.S. dollar, and credit risk. These risks are managed by maintaining an appropriate mix of cash deposits and securities in various currencies, placed with a variety of financial institutions for varying periods according to expected liquidity requirements.

As of 31 December 2018, we held \$136.8 million in marketable securities, with the aim of diversifying our investments and reducing credit risks. We have not entered into investments for trading or speculative purposes.

### ***Interest Rate Risk***

The Group’s surplus cash and cash equivalents are invested in interest-bearing savings, money market funds, corporate debt securities and commercial paper from time to time. The Group’s investments in corporate debt securities are subject to fixed interest rates. The Group’s exposure to interest rate sensitivity is impacted by changes in the underlying U.K. and U.S. bank interest rates and the fair market value of our corporate debt securities will fall in value if market interest rates increase. Management does not believe an immediate one percentage point change in interest rates would have a material

effect on the fair market value of our portfolio, and therefore does not expect the operating results or cash flows to be significantly affected by changes in market interest rates.

### ***Currency Risk***

The Group is exposed to foreign exchange rate risk because we currently operate in the United Kingdom and the United States. The Group's revenue from the GSK Collaboration and License Agreement is denominated in pounds sterling and is generated by the U.K.-based subsidiary, which has a pounds sterling functional currency. As a result, these sales are subject to translation into U.S. Dollars when the Group consolidates its financial statements. The Group's expenses are generally denominated in the currency in which the operations are located, which are the United Kingdom and the United States. However, the U.K.-based subsidiary incurs significant research and development costs in U.S. dollars and, to a lesser extent, Euros.

The results of operations and cash flows will be subject to fluctuations due to changes in foreign currency exchange rates, which could harm our business in the future. The Group seeks to minimize this exposure by maintaining currency cash balances at levels appropriate to meet foreseeable expenses in U.S. dollars and pounds sterling. To date, the Group has not used forward exchange contracts or other currency hedging products to manage exchange rate exposure, although it may do so in the future. The exchange rate as of 31 December 2018, the last business day of the reporting period, was £1.00 to \$1.27.

### ***Credit Risk***

The Group's cash and cash equivalents are held with multiple banks and the Group monitors the credit rating of those banks. The investments in corporate debt securities and commercial paper are subject to credit risk. The Group's investment policy limits investments to certain types of instruments, such as money market instruments, corporate debt securities and commercial paper, places restrictions on maturities and concentration by type and issuer and specifies the minimum credit ratings for all investments and the average credit quality of the portfolio.

Trade receivables were \$0.2 million and \$0.2 million as of 31 December 2018 and 2017, respectively. Trade receivables arise in relation to the GSK Collaboration and License Agreement. We have been transacting with GSK since 2014, during which time no impairment losses have been recognized. There was \$0.2 million past due as of 31 December 2018.

### ***Going Concern***

The Group's financial position, including its cash flows and liquidity position, are fully described in the consolidated financial statements. Having reviewed cash flow forecasts for the 12 month period following the date of signing the financial statements, the Directors have a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future. Thus, they continue to adopt the going concern basis in preparing these financial statements despite the current uncertain economic climate.

## **ENVIRONMENTAL MATTERS**

Our operations require the use of hazardous materials, which, among other matters, subjects us to a variety of federal, state, local and foreign environmental, health and safety laws, regulations and permitting requirements, including those relating to the handling, storage, transportation and disposal of biological and hazardous materials and wastes. The primary hazardous materials we handle or use include human blood samples and solvents. Some of the regulations under the current regulatory structure provide for strict liability, holding a party liable for contamination at currently and formerly owned, leased and operated sites and at third-party sites without regard to fault or negligence. We could be held liable for damages and fines as a result of our, or others', operations or activities should contamination of the environment or individual exposure to hazardous substances occur. We could also be subject to significant fines for failure to comply with applicable environmental, health and safety requirements. We cannot predict how changes in laws or development of new regulations will affect our business operations or the cost of compliance.

## GREENHOUSE GAS REPORT

Our greenhouse gas emissions estimates for 2018 and 2017 have been prepared in accordance with the U.K. Government’s Department for Environment, Food and Rural Affairs (Defra) guidance document “Environmental Reporting Guidelines: Including Mandatory GHG emissions reporting guidance, from June 2013”.

### *Greenhouse Gas Emissions for the Group*

<i>Period</i>	<b>Year ended 31 December 2018</b>	<b>Year ended 31 December 2017</b>
<b>Source</b>	<b>Tonnes carbon dioxide equivalent (tCO<sub>2</sub>-e)</b>	<b>Tonnes carbon dioxide equivalent (tCO<sub>2</sub>-e)</b>
Estimated greenhouse gas emissions from our own activities, including the combustion of fuel and the operation of our facilities	0.00	0.00
Estimated greenhouse gas emissions from purchased electricity, heat, steam or cooling for own use	3,263.63	916.26
<b>Total estimated greenhouse gas emissions</b>	<b>3,263.63</b>	<b>916.26</b>
<b>Intensity ratio: Total greenhouse gas emissions per employee on the basis of the average number of 409 full-time equivalent employees during the year ended 31 December 2018 (2017: 330).</b>	<b>8.038</b>	<b>2.777</b>

We have used the most recent evidence or estimates provided by our energy supply partners to generate our disclosure of emissions for the period. These include the purchase of electricity, heat, steam or cooling. Standard emissions factors from Defra’s GHG Conversion Factor Repository were applied to estimate emissions. The Group considers that the intensity ratio of tonnes of carbon dioxide per full-time equivalent employee is a suitable metric for its operations.

Electricity usage at our leased facilities in the United States and the United Kingdom drive the majority of our greenhouse gas emissions. Our estimates reflect the use of coolant gasses for refrigeration purposes at our laboratories in Oxfordshire.

The increase in greenhouse gas emissions in the year ended 31 December 2018 compared to the year ended 31 December 2017 is driven by several factors, including the increase in the Group’s employees during 2018 and the increase in routine manufacturing of T-cells at our facility in the USA.

The Group actively looks to minimise indirect areas of emissions by enabling remote working and promoting online conferencing facilities to reduce business travel.

## EMPLOYEES

As at 31 December 2018, we had 430 employees (including our Chief Executive Officer who is also a Company Director), compared to 371 as at 31 December 2017. Of these employees, 337 were in R&D (including in manufacturing and operations, and quality control and quality assurance) and 93 were in management and administrative functions (including business development, finance, intellectual property, and information technology and general administration). The average number of full-time equivalent employees during the year ended 31 December 2018 was 409 (*year ended 31 December 2017: 330*).

We have never had a work stoppage and none of our employees are covered by collective bargaining agreements or represented by a labour union. We believe our employee relations are good.

### *Diversity*

Appointments within the Group are made on merit according to the balance of skills and experience offered by prospective candidates. Whilst acknowledging the benefits of diversity, individual appointments are made irrespective of personal characteristics such as race, disability, gender, sexual orientation, religion or age.

A breakdown of the employment statistics on the basis of employees as at 31 December 2018 is as follows:

<b>Position</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Company Director (1)	8	1	9
Senior Manager	3	2	5
Other Employees	185	239	424
Total Employees (2)	188	241	429

(1) Includes our Chief Executive Officer

(2) Excludes our Chief Executive Officer

## **EMPLOYEE CONSULTATION AND HUMAN RIGHTS**

The Group places considerable value on the involvement of its employees. Meetings are held with employees to discuss the operations and progress of the business and employees are encouraged to become involved in the success of the Group through share option schemes (see note 23 to the financial statements).

The Group endeavours to impact positively on the communities in which it operates. The Group does not, at present, have a specific policy on human rights. However, we have several policies that promote the principles of human rights. We will respect the human rights of all our employees, including: provision of a safe, clean working environment; ensuring employees are free from discrimination and coercion; not using child or forced labour and respecting the rights of privacy and protecting access and use of employee personal information. We also have an equal opportunities policy which promotes the right of every employee to be treated with dignity and respect and not to be harassed or bullied on any grounds.

The Strategic Report was approved by the Board on 26 February 2019.

On behalf of the Board



**James J Noble**  
Director

26 February 2019

### **Remuneration Committee Chairman's Statement**

On behalf of the Board of Directors of Adaptimmune Therapeutics plc, I am pleased to present the Directors' Remuneration Report for the year ended 31 December 2018. Shareholders will be invited to approve the Report on Remuneration (which will be a non-binding advisory vote) at the Annual General Meeting of shareholders to be held on 2 May 2019.

### ***Period Covered by the Directors' Remuneration Report***

The Directors' Remuneration Report that follows is for the full year period from 1 January 2018 to 31 December 2018 except where otherwise stated.

### ***The Remuneration Committee***

The Committee is responsible for reviewing and establishing our executive remuneration policy and philosophy, including making recommendations regarding the remuneration of our Chief Executive Officer ("CEO") to the Board for its approval, and determining and approving the remuneration of other senior executive officers. While the Board sets the remuneration of our CEO, who is our sole Executive Director, the Committee makes recommendations on such matters to the Board.

### ***Philosophy***

We seek to attract and retain outstanding employees who have the potential to support the growth of the Group and to attract and retain Non-Executive Directors who can substantially contribute to our success as an innovative, clinical-stage biopharmaceutical company. As the Group has operations in the United Kingdom and the United States, our senior executives and our Non-Executive Directors live and work in the U.K. and the U.S., and we are listed on a U.S. stock exchange, we assess the competitiveness of our policies against both U.K. and U.S. benchmarks and practices, with an increasing focus on U.S. benchmarks and practices.

### ***Business Strategy during 2018***

Our primary goal in 2018 was to progress the development of the Group including:

- advancement of our clinical trials for ADP-A2M10, ADP-A2M4 and ADP-A2AFP;
- continuing to use our SPEAR T-cell platform to generate SPEAR T-cells for cancers where existing therapeutic approaches are limited;
- continuing to understand, further enhance and improve the effectiveness and persistence of our SPEAR T-cell therapies; and
- the optimisation and expansion of our process development and manufacturing capabilities to maintain our leadership position in the TCR space and the continued expansion of our intellectual property portfolio.

### ***2018 Business Highlights***

2018 was a year of strong operational performance for Adaptimmune.

Key business highlights during 2018 included:

#### *Advancement of our clinical trials for ADP-A2M10, ADP-A2M4 and ADP-A2AFP*

- Two Phase 1 clinical trials are ongoing with ADP-A2M10. The first clinical trial is in patients with non-small cell lung cancer ("NSCLC"). The second clinical trial is in patients with three cancer tumour types, urothelial, melanoma and head and neck cancers.

- In 2018, both trials have progressed to the expansion phase, with patients being treated with up to 10 billion transduced SPEAR T-cells.
- A Phase 1 clinical trial is ongoing with ADP-A2M4 in bladder, melanoma, head and neck, ovarian, NSCLC, synovial sarcoma, myxoid round cell liposarcoma (“MRCLS”), oesophageal and gastric cancers.
  - In 2018, this trial progressed to the expansion phase with patients being treated with up to 10 billion transduced SPEAR T-cells.
- A Phase 1 clinical trial is ongoing with ADP-A2AFP in patients with hepatocellular cancer.
  - In 2018, this trial moved into the dose escalation phase within the second dose cohort, with patients in Cohort 2 receiving a target dose of 1 billion SPEAR T-cells.

*Successful transition of NY-ESO program*

- During 2018, a fourth SPEAR T-cell, the NY-ESO SPEAR T-cell was transitioned to GlaxoSmithKline (“GSK”) following GSK’s exercise of its option to obtain an exclusive global license to the NY-ESO SPEAR T-cell programme in September 2017. GSK has assumed full responsibility for all development, manufacturing and commercialization activities for the NY-ESO SPEAR T-cell including progression of this SPEAR T-cell into further clinical trials.

*Optimization and expansion of our manufacturing capabilities*

- Impressive progress was achieved in manufacturing:
  - we initiated manufacture of cell product in January 2018 at the Adaptimmune SPEAR T-cell manufacturing plant in Philadelphia
  - we scaled to the routine manufacture of SPEAR T-cells at target doses to treat patients across a broad range of solid tumours
  - we established a dedicated vector manufacturing capability in the U.K. and our first vector production run to support pilot clinical trials is anticipated for late 2019
  - we secured existing vector production with our third party vendor
- These achievements enable us to continue to develop manufacturing enhancements and improvements with the aim of reducing the time taken to manufacture and supply patient products.

*Progression of our pre-clinical pipeline*

- We continued to maintain development of our pipeline, including:
  - making good progress with an off-the-shelf product and presenting progress to date at ASGCT 2018
  - continuing to develop multiple next generation approaches, with the goal of having the first next generation construct ready for IND submission in 2H 2019
  - investigating new targets in the context of new HLA types to be brought to the clinic beyond 2019

*Other corporate achievements*

- The Company completed a Registered Direct Offering raising net proceeds of approximately \$100 million in September 2018.

*Activities and major decisions*

The Committee's activities during the year included a benchmarking review of executive compensation, which was undertaken to ensure that remuneration for the senior executive team remains competitive for the purposes of retention and engagement. The Committee engaged Willis Towers Watson as independent advisors to benchmark executive compensation against a selected peer group consisting largely of comparable U.S.-listed biopharmaceutical companies, with some U.K.-listed biopharmaceutical companies, and to provide recommendations for base salaries, equity based awards and the structure of bonus incentive awards for 2019.

As a result of this benchmarking exercise, our CEO and senior executive officers received increased base salaries at levels that remain compliant with the last approved Directors' Remuneration Policy. For our CEO, this resulted in a base salary of £457,126 effective from 1 January 2019, to maintain competitive positioning against the peer group.

In December 2018 the Committee also considered the extent of achievement of 2018 calendar year objectives by the executive team and determined the level of bonus incentive awards payable in respect of the 2018 calendar year. The awards made to our CEO and senior executive officers recognised that most of our corporate objectives for 2018 were achieved, with our CEO receiving a bonus award at 85% of the target amount.

In January 2019 the Committee approved the objectives to be achieved by the executive team during 2019. These are considered to be commercially sensitive and will not be disclosed in detail, but are designed to support achievement of our strategic objective to be a world leader in discovering, developing and commercialising TCR-based T-cell therapies that transform the clinical outcomes of patients with cancer and our ambition to be a fully integrated cell therapy company and to have the first TCR T-cell approved for a solid tumour indication.

The 2019 objectives are linked to our business goals, which include the continuation of some 2018 goals, with the addition of a key objective for 2019:

- the advancement of our clinical trials for ADP-A2M10, ADP-A2M4 and ADP-A2AFP. A key objective is to advance these wholly owned SPEAR T-cells further during 2019 with the aim of providing initial clinical data for ADP-A2M10 and ADP-A2M4 during the first half of 2019;
- continuing to use our SPEAR T-cell platform to generate SPEAR T-cells for cancers where existing therapeutic approaches are limited;
- continuing to understand, further enhance and improve the effectiveness and persistence of our SPEAR T-cell therapies;
- the optimisation and expansion of our process development and manufacturing capabilities to maintain our leadership position in the TCR space; and
- the continued expansion of our intellectual property portfolio.

Generally, the remuneration arrangements adopted in 2019 recognise the greater demands placed on our CEO and senior executive team to deliver on our strategy and create value for our shareholders.

Finally, under the last approved Directors' Remuneration Policy, the Board has discretion to pay Non-Executive Directors in the form of a mixture of cash and equity. The remuneration arrangements for Non-Executive Directors during 2018 comprised an award of a fixed number of share options, plus an additional number of share options or cash payment at the Director's election. The option awards and cash payments were made at competitive levels aligned with peer group data from comparable companies provided in a benchmarking analysis undertaken by Willis Towers Watson in 2018.



**David M Mott**  
Director and Chairman of the Remuneration Committee  
26 February 2019

ADAPTIMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

**PART I - REPORT ON REMUNERATION**

*The information provided in this part of the Directors' Remuneration Report is subject to audit.*

The Remuneration Committee presents the Report on Remuneration for the year ended 31 December 2018, which will be put to shareholders for a non-binding vote at the Annual General Meeting to be held on 2 May 2019.

**Single Total Figure of Remuneration for each Director**

The following table shows the remuneration received by the Directors for the year ended 31 December 2018. For reference only, the table also shows the remuneration received by the Directors for the year ended 31 December 2017, which information was included in the Company's annual report and financial statements for the year ended 31 December 2017 and approved by shareholders at the Annual General Meeting held on 20 June 2018.

Name of Director	For the year ended 31 December 2018:						For the year ended 31 December 2017:					
	Fixed Pay <sup>(1)</sup>		Variable Pay <sup>(1)</sup>				Fixed Pay <sup>(1)</sup>		Variable Pay <sup>(1)</sup>			
	Salary and fees £	Taxable benefit £	Annual bonus £	Pension allowance £	Equity-Based Awards (6) £	Total £	Salary and fees £	Taxable benefit £	Annual bonus £	Pension allowance £	Equity-Based Awards (6) £	Total £
<b>Executive</b>												
James Noble (CEO)	420,065 (2)	906 (3)	196,380 (4)	21,003 (5)	—	638,354	407,830 (2)	844 (3)	183,524 (4)	20,392 (5)	—	612,590
<b>Non-executives</b>												
David Mott (Chairman)	—	—	—	—	—	—	—	—	—	—	—	—
Lawrence Alleva	23,511	—	—	—	—	23,511	—	—	—	—	—	—
Ali Behbahani	—	—	—	—	—	—	—	—	—	—	—	—
Barbara Duncan	—	—	—	—	—	—	—	—	—	—	—	—
John Furey	—	—	—	—	—	—	—	—	—	—	—	—
Giles Kerr	39,594	—	—	—	—	39,594	37,648	—	—	—	—	37,648
Elliott Sigal	—	—	—	—	—	—	—	—	—	—	—	—
Peter Thompson	—	—	—	—	—	—	—	—	—	—	—	—
Tal Zaks	34,286	—	—	—	—	34,286	33,493	—	—	—	—	33,493

*Notes to table of Single Total Figure of Remuneration for each Director*

- The majority of the remuneration was set and paid in pounds sterling (£). For the purpose of this table, the fees paid in U.S. dollars to Mr Lawrence Alleva and Dr Tal Zaks for the year ended 31 December 2018 have been translated into pounds sterling based on the U.S. dollar/pound sterling exchange rate at 31 December 2018 (\$1.27602 to £1). The fees paid in U.S. dollars to Dr Tal Zaks for the year ended 31 December 2017, have been translated into pounds sterling based on the U.S. dollar/pound sterling exchange rate at 31 December 2017 (\$1.35005 to £1).
- The base salary levels of our CEO and all other employees of the Group are reviewed and, to the extent deemed necessary, adjusted to be effective from 1 January in each year.
- Taxable benefits comprise medical insurance. Generally, Mr Noble participates in the same benefits as we offer to all our employees in the United Kingdom where Mr Noble resides.
- The annual bonus amount for each of the year ended 31 December 2018 and the year ended 31 December 2017 represents the total bonus payment that related to performance in each of 2018 and 2017.
- The pension allowance for each of the year ended 31 December 2018 and the year ended 31 December 2017 represents an amount equating to 5% of the base salary for each of 2018 and 2017.
- There were no performance obligations linked to the equity-based awards. In each of the year ended 31 December 2018 and the year ended 31 December 2017, the value of equity-based awards included in the table is based on the market value of underlying shares at the date of grant, less the applicable exercise price, which is nil because the exercise price was based on the market value of the underlying shares at the date of grant.

ADAPTIMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

**Annual Bonus**

The annual bonus for the year ended 31 December 2018 shown in the table above for Mr Noble, our CEO, was based on the achievement of objectives primarily linked to our business strategies and which included: the continued advancement of our clinical trials for ADP-A2M10, ADP-A2M4 and ADP-A2AFP; continuing to use our SPEAR T-cell platform to generate SPEAR T-cells for cancers where existing therapeutic approaches are limited; continuing to understand, further enhance and improve the effectiveness and persistence of our SPEAR T-cell therapies; optimization and expansion of our process development and manufacturing capabilities to maintain our leadership position in the TCR space and the continued expansion of our intellectual property portfolio.

The Board has considered whether it would be in the best interests of the Company and its shareholders to disclose the precise targets agreed for the performance measures in 2018. An additional consideration is that most of our competitors are based in the U.S. where market practice is not to disclose precise annual bonus targets for biotechnology companies at the pre-commercialization stage. As the specific objectives for a single year are based on the Group's long-term strategies, the Board has concluded that disclosing such targets would necessarily involve divulging competitively sensitive information that we believe would be detrimental to our commercial performance going forward and, therefore, we are providing the categories of objectives, rather than the precise targets.

**Statement of Directors' Shareholdings and Share Interests**

The table below shows, for each Director, the total number of shares owned, the total number of share options held and the number of share options vested as at 31 December 2018. No Director exercised any share options during the year ended 31 December 2018. The table only reflects shares held individually by each Director, or a family investment vehicle or trust, and does not include shares held by any investment fund with which the Director is affiliated.

Name of Director	Shares owned	Total share options	Vested share options (1)	Options exercised during year ended 31 December 2018
<i>Executive Director</i>				
James Noble (CEO)	11,172,600 (2)	11,418,148	7,701,405	—
<i>Non-Executive Directors</i>				
David Mott (Chairman)	—	844,530	657,200	—
Lawrence Alleva	117,864 (3)	1,114,628	958,143	—
Ali Behbahani	—	715,841	561,032	—
Barbara Duncan	—	719,774	499,141	—
John Furey	—	284,233	—	—
Giles Kerr	—	556,000	333,000	—
Elliott Sigal	367,038 (4)	1,104,236	916,942	—
Peter Thompson	—	565,603	565,603	—
Tal Zaks	—	556,000	333,000	—

- (1) All share options that were outstanding as at 31 December 2018 use time-based vesting and are not subject to performance targets other than continued service until the date of vesting.
- (2) Includes 1,200,000 Ordinary shares represented by 200,000 ADSs that Mr Noble purchased in October 2015.
- (3) Consists of 70,584 Ordinary shares represented by 11,764 ADSs that Mr Alleva purchased during the IPO and 47,280 Ordinary shares represented by 7,880 ADSs purchased by the Lawrence M. Alleva Revocable Trust in December 2018.
- (4) Includes 254,100 Ordinary shares held by Sigal Family Investments LLC, as well as 52,938 Ordinary shares represented by 8,823 ADSs that Dr Sigal purchased during the IPO and 60,000 Ordinary shares represented by 10,000 ADSs purchased by Sigal Family Investments LLC in May 2016.

ADAPT IMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

**Policy on Shareholding Requirements**

We do not currently have a policy requiring our Directors to hold a certain number or value of our shares. However, we encourage our Executive Director and senior executive officers to have a shareholding in the Company. The scale of our CEO's share ownership is well in excess of the most stretching shareholding guidelines demanded by investors and proxy advisors.

**Directors' Equity-based Awards Held at 31 December 2018**

The table below presents the interests of the Directors in options to acquire our Ordinary shares with a nominal value of £0.001 per share as at 31 December 2018. 3,415,470 options were granted to Directors during the year ended 31 December 2018. None of our Directors exercised any options during the year ended 31 December 2018.

<b>Name of Director</b>	<b>Options Held</b>	<b>Grant date</b>	<b>Start date for vesting</b>	<b>Exercise price</b>	<b>First date of exercise of some or all options (1)</b>	<b>Date of expiry</b>
<b>Executive Director</b>						
James Noble (CEO) (2)	1,335,000	20/03/15	31/03/14	£ 0.1120	31/03/14	30/03/24
	438,100	20/03/15	31/03/14	£ 0.1120	31/03/15	30/03/24
	3,500,000	20/03/15	19/12/14	£ 0.3557	19/12/15	19/12/24
	1,968,016	18/01/16	18/01/16	£ 0.89	18/01/17	18/01/26
	2,072,976	13/01/17	13/01/17	£ 0.59	13/01/18	13/01/27
	1,719,936	12/01/18	12/01/18	£ 0.96	12/01/19	12/01/28
	384,120	12/01/18	12/01/18	£ 0.001	12/01/19	12/01/28
<b>Total</b>	<b>11,418,148</b>					
<b>Non-Executive Directors</b>						
David Mott (Chairman)	163,229	11/05/15	11/05/15	£ 1.82	11/05/15	11/05/25
	191,410	11/08/16	11/08/16	£ 0.97	11/08/17	11/08/26
	302,561	03/07/17	03/07/17	£ 0.58	03/07/18	03/07/27
	187,330	22/06/18	22/06/18	£ 1.65	22/06/19	22/06/28
<b>Total</b>	<b>844,530</b>					
Lawrence Alleva (3)	519,481	16/03/15	16/03/16	£ 0.50	16/03/16	16/03/25
	30,745	11/05/15	11/05/15	£ 1.82	11/05/15	11/05/25
	196,678	11/08/16	11/08/16	£ 0.97	11/08/17	11/08/26
	243,724	03/07/17	03/07/17	£ 0.58	03/07/18	03/07/27
	124,000	22/06/18	22/06/18	£ 1.65	22/06/19	22/06/28
<b>Total</b>	<b>1,114,628</b>					
Ali Behbahani	155,682	11/05/15	11/05/15	£ 1.82	11/05/15	11/05/25
	184,562	11/08/16	11/08/16	£ 0.97	11/08/17	11/08/26
	220,788	03/07/17	03/07/17	£ 0.58	03/07/18	03/07/27
	154,809	22/06/18	22/06/18	£ 1.65	22/06/19	22/06/28
<b>Total</b>	<b>715,841</b>					
Barbara Duncan (4)	332,776	23/06/16	23/06/16	£ 1.01	23/06/17	23/06/26
	228,765	03/07/17	03/07/17	£ 0.58	03/07/18	03/07/27
	158,233	22/06/18	22/06/18	£ 1.65	22/06/19	22/06/28
<b>Total</b>	<b>719,774</b>					
John Furey (4)	284,233	05/07/18	05/07/18	£ 1.49	05/07/19	05/07/28
Giles Kerr (4)	288,000	29/11/16	29/11/16	£ 0.65	29/11/17	29/11/26
	144,000	03/07/17	03/07/17	£ 0.58	03/07/18	03/07/27
	124,000	22/06/18	22/06/18	£ 1.65	22/06/19	22/06/28
<b>Total</b>	<b>556,000</b>					
Elliott Sigal (3)	519,481	16/03/15	16/03/16	£ 0.50	16/03/16	16/03/25
	24,596	11/05/15	11/05/15	£ 1.82	11/05/15	11/05/25
	184,562	11/08/16	11/08/16	£ 0.97	11/08/17	11/08/26
	220,788	03/07/17	03/07/17	£ 0.58	03/07/18	03/07/27
	154,809	22/06/18	22/06/18	£ 1.65	22/06/19	22/06/28

ADAPT IMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

<i>Total</i>	<u>1,104,236</u>						
Peter Thompson (5)	155,682	11/05/15	11/05/15	£	1.82	11/05/15	11/05/25
	186,142	11/08/16	11/08/16	£	0.97	11/08/17	11/08/26
	<u>223,779</u>	03/07/17	03/07/17	£	0.58	03/07/18	03/07/27
<i>Total</i>	<u>565,603</u>						
Tal Zaks (4)	288,000	29/11/16	29/11/16	£	0.65	29/11/17	29/11/26
	144,000	03/07/17	03/07/17	£	0.58	03/07/18	03/07/27
	<u>124,000</u>	22/06/18	22/06/18	£	1.65	22/06/19	22/06/28
<i>Total</i>	<u>556,000</u>						

*Notes to table of Directors' Equity-based Awards Held at 31 December 2018*

- All share options awarded to Directors that were outstanding as at 31 December 2018 use time-based vesting and are not subject to performance targets other than continued service until the date of vesting.
- All options granted to James Noble on 20 March 2015 were granted as replacement options in exchange for options formerly held over Ordinary shares of Adaptimmune Limited. Generally, these replacement options vest and become exercisable as follows: 25% on the first anniversary of the grant date of the original options and 75% in monthly instalments over the following three years.
- 519,481 options granted to Lawrence Alleva and 519,481 options granted to Dr Elliott Sigal vest and become exercisable as follows: 25% on the first anniversary of the grant date and 75% in monthly instalments over the following three years. All options granted to Non-Executive Directors on 11 May 2015 vested and became exercisable on 11 May 2015. All options granted to Non-Executive Directors on 11 August 2016 vested and became exercisable on 11 August 2017. All options granted to Non-Executive Directors on 3 July 2017 vested and became exercisable on 3 July 2018. All options granted to Non-Executive Directors on 22 June 2018 vest and become exercisable on 22 June 2019.
- 332,776 options granted to Barbara Duncan, 288,000 options granted to Giles Kerr 288,000 options granted to Tal Zaks and 284,233 options granted to John Furey were awarded on appointment as new Directors, and vest and become exercisable as follows: 25% on the first anniversary of the grant date and 75% in monthly instalments over the following two years.
- Peter Thompson stood down from the Board on 5 July 2018 and did not receive an annual award of options in 2018. In recognition of Dr Thompson's service as a Board member and as a member of the Remuneration Committee up to 5 July 2018, he was permitted a 12 month period in which to exercise those options which had vested as at 5 July 2018. Any options that are not exercised by 5 July 2019 will lapse and cease to be exercisable.

The closing market price of our ADSs on 31 December 2018 was \$5.75. One ADS represents six Ordinary shares.

***Payments Made to Past Directors***

During the year ended 31 December 2018, we made no payments to former Directors of the Company.

***Payments for Loss of Office***

During the year ended 31 December 2018, we made no payments with respect to a Director's loss of office.

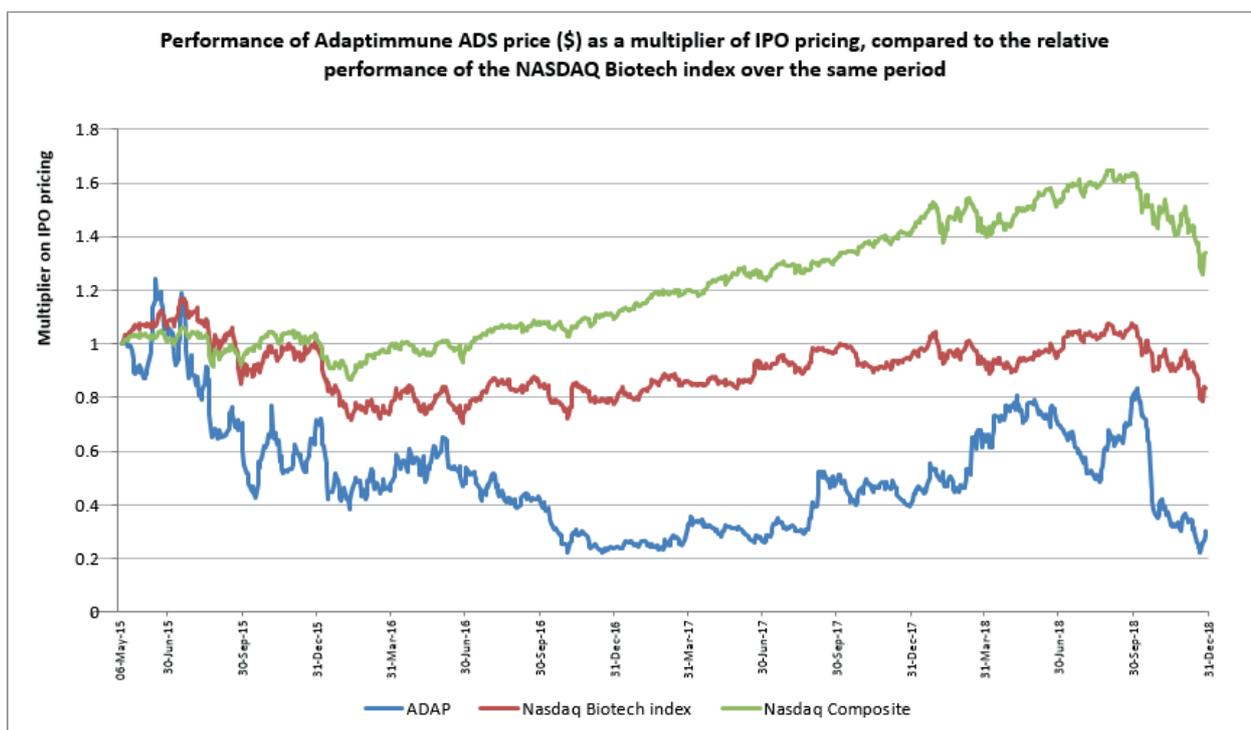
***Illustration of Total Shareholder Return***

***The information provided in this part of the Directors' Remuneration Report is not subject to audit.***

The following graph compares the cumulative total shareholder return on our ADSs, each representing six Ordinary shares, with that of the Nasdaq Biotech Index and the Nasdaq Composite Index for the period that our shares were publicly traded, which commenced on 6 May 2015. We selected the Nasdaq Biotech Index because our ADSs trade on The Nasdaq Global

ADAPTIMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
 For the year ended 31 December 2018

Select Market and we believe this indicates our relative performance against a group consisting of more similarly situated companies.



**Chief Executive Officer Total Remuneration History**

The table below sets out total remuneration details for the Chief Executive Officer.

Period	Single total figure of remuneration £ (1)	Annual bonus payout against maximum opportunity (2)	Long term incentive vesting rates against maximum opportunity (3)
Year ended 31 December 2018:	638,354	47 %	100 %
Year ended 31 December 2017:	612,590	45 %	100 %

- (1) The Single total figure of remuneration for the year ended 31 December 2018 includes the annual bonus payment for performance in the year ended 31 December 2018. The Single total figure of remuneration for the year ended 31 December 2017 includes the annual bonus payment for performance in the year ended 31 December 2017.
- (2) The bonus payout percentage amount for the year ended 31 December 2018 relates to the total annual bonus payment for performance in the year ended 31 December 2018. The bonus payout percentage amount for the year ended 31 December 2017 relates to the total annual bonus payment for performance in the year ended 31 December 2017. In both years, the maximum opportunity was an annual bonus payment of up to 100% of salary, which was in line with the last approved Directors' Remuneration Policy.
- (3) The amount shown represents the percentage of the options that actually vested during the period expressed as a percentage of the maximum number of options that could have vested during the period. There were no performance obligations linked to these equity-based awards, other than service obligations, and therefore, all options that could have vested during the period have actually vested.

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**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

**Chief Executive Officer's Remuneration Compared to Other Employees**

The Chief Executive Officer's average fixed salary of £420,065 for the year ended 31 December 2018 was 5.8 times the value of the average fixed salary of the Group's comparator employees for such period. His average fixed salary of £407,830 for the year ended 31 December 2017 was 6.1 times the value of the average fixed salary of the Group's comparator employees for that period.

The following table shows the percentage change in remuneration of the Chief Executive Officer in comparison to the percentage change in remuneration of an employee in the comparator group (1) between the year ended 31 December 2018 and the year ended 31 December 2017.

**Percentage change in remuneration in the year ended 31 December 2018  
compared with remuneration in the year ended 31 December 2017**

	Average change per employee	
	CEO	(1)
Base salary	3.0 %	7.9 %
Annual bonus	7.0 %	10.8 %
Taxable benefits	7.3 %	(1.1)% (2)

(1) The employee comparator group comprises all UK and US employees who were employed for the full 24 month period ended 31 December 2018. The percentage change calculations were performed in local currency and then combined using a weighted average based on the number of employees. This group is considered to be an appropriate comparator group because it is representative of the Group's employees in terms of seniority and demographics; additionally, using a consistent employee group, with the same individuals appearing in the 2017 and 2018 groups, enables a meaningful comparison to be made.

(2) Taxable benefits for the CEO and for employees comprise small amounts and, therefore, any change generates a significant percentage decrease or increase. For the year ended 31 December 2018, the CEO's taxable benefits totalled £906 (2017: £844) – for more details, please refer to the table for 'Single Total Figure of Remuneration for each Director' earlier in this report.

**Relative Importance of Spend on Pay**

The following table sets forth the total amounts spent by the Company and its direct and indirect subsidiaries on remuneration for the year ended 31 December 2018 and the year ended 31 December 2017. Given that the Group remains in the early phases of its business life cycle, the comparator chosen to reflect the relative importance of the Group's spend on pay is the Group's research and development expenses as shown in its consolidated income statement on page 57 of its Annual Report and Financial Statements for the year ended 31 December 2018.

<i>Period:</i>	Year ended 31 December 2018	Year ended 31 December 2017
Total spend on remuneration (1):	\$ 64,276,000	\$ 47,358,000
Research and development expenses:	\$ 115,242,000	\$ 96,381,000

(1) The total spend on remuneration includes the value of equity-based awards as recognised in the financial statements in accordance with International Financial Reporting Standard 2 "Share-Based Payments".

**Executive Director Remuneration for the year ending 31 December 2019**

**Salary**

In 2018, the Committee engaged Willis Towers Watson as independent advisors to benchmark executive compensation, to ensure that it remains competitive for the purposes of retention and engagement. Willis Towers Watson benchmarked executive compensation against a selected peer group consisting largely of comparable U.S.-listed biopharmaceutical companies, with some U.K.-listed biopharmaceutical companies, and to provide recommendations for base salaries, equity based awards and the structure of bonus incentive awards for 2019.

ADAPT IMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

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As a result of this benchmarking exercise, our CEO and senior executive officers received increased base salaries at levels that remain compliant with the last approved Directors' Remuneration Policy. For our CEO, this resulted in a base salary of £457,126 effective from 1 January 2019.

***Annual bonus***

For the year ending 31 December 2019, the CEO is eligible for a target bonus award of 60% of his base salary of £457,126 (that is, £274,276), subject to the achievement of objectives. These are linked to our business strategies, which include: the advancement of our clinical trials for ADP-A2M10, ADP-A2M4 and ADP-A2AFP. A key objective is to advance these wholly owned SPEAR T-cells further during 2019 with the aim of providing initial clinical data for ADP-A2M10 and ADP-A2M4 during the first half of 2019; continuing to use our SPEAR T-cell platform to generate SPEAR T-cells for cancers where existing therapeutic approaches are limited; continuing to understand, further enhance and improve the effectiveness and persistence of our SPEAR T-cell therapies; the optimisation and expansion of our process development and manufacturing capabilities to maintain our leadership position in the TCR space; and the continued expansion of our intellectual property portfolio.

It is anticipated that the Board will meet in the first quarter of 2020 to assess the performance of the CEO for the year ending 31 December 2019 against the objectives.

The Board has considered whether it would be in the best interests of the Company and its shareholders to disclose the precise targets agreed for the performance measures in 2019. An additional consideration is that most of our competitors are based in the U.S. where market practice is not to disclose precise annual bonus targets for biotechnology companies at the pre-commercialization stage. As the specific objectives for a single year are based on the Group's long-term strategies, the Board has concluded that disclosing such targets would necessarily involve divulging competitively sensitive information that we believe would be detrimental to our commercial performance going forward and, therefore, we are providing the categories of objectives, rather than the precise targets.

***Long-term incentives***

During January 2019, awards of share options were made to our CEO and other Senior Executive Officers. These awards were within market competitive levels provided by Willis Towers Watson, following their benchmarking assessment of equity awards made to executive teams in a peer group of comparable U.S. and U.K. listed biopharmaceutical companies, with a priority focus on U.S. companies, and were also within the principles of the last approved Directors' Remuneration Policy. These awards were disclosed on Form 4s submitted to the Securities and Exchange Commission on 8 January 2019.

***The Remuneration Committee***

The Remuneration Committee is comprised of Mr Mott (Chairman), Mr Furey and Dr Zaks. All members have continued to serve until the date of this Report on Remuneration. The charter of the Committee is set forth on our website at <http://www.adaptimmune.com>

***Advice Provided to the Remuneration Committee***

The Committee retained Willis Towers Watson to provide independent advice and consultation with respect to remuneration arrangements for the CEO (being our sole Executive Director) and senior management. Willis Towers Watson is a global remuneration consultant with a well-established reputation for the design and implementation of remuneration programmes, including the design and implementation of equity-based incentive programmes. The Committee also sourced certain market research data reports from Radford remuneration consultants. In the year ended 31 December 2018, the amounts paid to Willis Towers Watson totalled \$130,783 and the amounts paid to Radford totalled \$7,050.

In addition to Willis Towers Watson and Radford, the Committee solicited and received input from the CEO concerning the remuneration of senior executives other than himself. The CEO provided recommendations with respect to annual cash

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**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

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bonuses to be paid to these persons for service in the year ended 31 December 2018 and base salaries effective from 1 January 2019 and with respect to equity-based awards made to these persons in January 2019. Finally, the CEO also provided input to the Committee regarding the implementation of equity-based remuneration as an element of all other employees' remuneration.

***Statement of Voting Results***

Voting at our shareholder meetings has generally been conducted by show of hands by shareholders who are in attendance at the meeting. At the Annual General Meeting held on 20 June 2018, all of the resolutions set out in the Notice of the Annual General Meeting sent to shareholders were duly proposed and passed by unanimous approval, including the resolution proposing the approval of the Directors' Remuneration Report for the year ended 31 December 2017 and the resolution proposing the approval of the Directors' Remuneration Policy to apply effective from the end of that Annual General Meeting. No votes were withheld.

Details of the proxy votes received in relation to the resolution proposing the approval of the Directors' Remuneration Report for the year ended 31 December 2017, and in relation to the resolution proposing the approval of the Directors' Remuneration Policy were as follows:

<b>Resolution</b>	<b>Votes For</b>	<b>% of Total</b>	<b>Votes Against</b>	<b>% of Total</b>	<b>Votes Withheld</b>	<b>% of Total</b>
To approve the Directors' Remuneration Report	444,072,376	99.88	523,800	0.12	144,768	0.033
To approve the Directors' Remuneration Policy	444,092,212	99.88	514,152	0.12	134,580	0.0003

***Statement of Implementation of Remuneration Policy in the Year ended 31 December 2018***

There have been no changes to the Directors' Remuneration Policy, as approved at the Annual General Meeting of shareholders held on 20 June 2018. In 2019, the Company intends to adhere to the policy as approved.

## **PART II - DIRECTORS' REMUNERATION POLICY**

*The information provided in this part of the Directors' Remuneration Report is not subject to audit.*

We have set forth below a summary of the remuneration policy for the Executive Directors and for our Non-Executive Directors.

The Directors' Remuneration Policy was approved at the Annual General Meeting held on 20 June 2018 and remains effective for a maximum of three years, until 19 June 2021, or until a revised policy is approved by shareholders. The last approved remuneration policy can also be found in the Annual Report and Financial Statements of the Company for the year ended 31 December 2017, which is available in the Investors section of our website:  
<http://www.adaptimmune.com>

### ***Summary of remuneration policy – Executive Directors***

As Adaptimmune Therapeutics plc is a U.K. incorporated company listed on NASDAQ, the Group has operations in the U.K. and the U.S., our senior executives and our Non-Executive Directors live and work in the U.K. and the U.S., the Committee considers it appropriate to examine and be informed by compensation practices in both the U.K. and U.S., particularly in the matter of equity-based incentives, with an increasing focus on U.S. benchmarks and practices. The Committee considers that the last approved Directors' Remuneration Policy continues to be appropriate and fit for purpose, but the Committee is committed to reviewing the remuneration policy on an ongoing basis in order to ensure that it remains effective and competitive.

The Directors' Remuneration Policy is used to determine the remuneration for our CEO, our sole Executive Director, as well as for our other senior executives, and would also apply to other Executive Directors and senior executives that we appointed.

As described in the last approved Directors' Remuneration Policy, the elements of remuneration for the Executive Director(s) and Senior Executives comprise: base salary, pension or pension allowance payment, benefits (currently, access to death-in-service life insurance, family private medical cover and ill-health income protection), annual bonus and long term equity incentives (currently, share option awards).

The remuneration of our CEO is determined by the Board after having considered recommendations from the Committee. The remuneration of other senior executives in the Company, excluding our CEO, (the "Senior Executives") is determined by the Committee.

In 2018, the Committee retained an independent remuneration consultant, Willis Towers Watson, to assist the Committee in ensuring that our remuneration arrangements for the Executive Director and senior executives are competitive for the calendar year commencing 1 January 2019. Willis Towers Watson provided data from comparable publicly traded biopharmaceutical companies and otherwise assisted the Committee in its design of competitive remuneration for the Executive Director and senior executives. We expect to continue to use remuneration consultants to assist the Committee in determining competitive levels of executive remuneration and specific design elements of our remuneration programme.

ADAPTIMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

The following tables present the elements of remuneration for our CEO (our sole Executive Director) and our other senior executives.

Element of Remuneration	Purpose and link to strategy	Operation	Maximum	Performance targets
Base salary	Rewards skills and experience and provides the basis for a competitive remuneration package.	<p>Salaries will be reviewed annually by reference to:</p> <ul style="list-style-type: none"> <li>(i) market practice and market data on which the Committee receives independent advice;</li> <li>(ii) the individuals' experience and scope of the role;</li> <li>(iii) broader employee increases and</li> <li>(iv) rates of inflation.</li> </ul> <p>Salaries will be benchmarked against comparable roles in a selected peer group of US- and European-listed biopharmaceutical companies with similar market capitalisations and/or scale of operational complexity.</p> <p>We typically expect to align salaries with the 50<sup>th</sup> percentile of peer group comparator data but may vary from this general rule where we consider that special circumstances apply or where recruitment or retention of a particular role is required.</p> <p>The Committee may also decide to approve future increases following changes to job responsibilities or to reflect experience within the role.</p>	<p>Salaries will not generally exceed the 75<sup>th</sup> percentile of peer group comparator data for the relevant role unless there is a clear business rationale to do so.</p> <p>The Committee will reference alternative data for roles not widely represented in the core peer group.</p> <p>The Committee retains discretion to adjust the Executive Directors' base salaries to ensure that we can attract and retain the necessary talent to effectively compete in the global marketplace.</p>	Not applicable.
Pension	Enables Executive Directors to build long-term retirement savings.	Company contribution to a personal pension scheme or a pension allowance payment, at the election of the Executive Director. Levels will be reviewed annually and the Committee may decide to increase future contribution levels should the review indicate such a change is appropriate.	5% of basic salary.	Not applicable.

ADAPTIMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

Element of Remuneration	Purpose and link to strategy	Operation	Maximum	Performance targets
Benefits	Protects against risks and provides other benefits in line with market practice.	<p>Benefits currently include death-in-service life insurance, family private medical cover and ill-health income protection. The Committee will review benefits offered from time to time and retains the discretion to add or substitute benefits to ensure they remain market competitive.</p> <p>In the event that the Group requires an Executive Director to relocate, we would offer appropriate relocation assistance.</p>	Not applicable.	Not applicable.
Annual Bonus	Rewards achievement of the near-term business objectives set at the start of each calendar year and reflects individual and team performance of the Executive Director and other Senior Executives in achieving those objectives, and progress towards achieving our strategic goals.	<p>Objectives are set at the start of each calendar year.</p> <p>The choice of annual performance objectives will reflect the Committee's assessment of the key milestones/metrics required to be achieved within the calendar year in order to make progress towards achieving our strategic goals.</p> <p>The target annual cash bonus for our Executive Directors will be established as a percentage of base salary.</p> <p>The annual bonus is payable in cash after award.</p> <p>When business opportunities or challenges change substantially during the course of the year, the Committee may adjust objectives to meet the changed circumstances and correspondingly realign potential rewards.</p>	<p>Awards will normally be limited to a maximum of 100% of basic salary.</p> <p>In exceptional periods, considered to be those years in which achievements lead to a transformational effect on the future prospects or the valuation of the business, the annual maximum may increase to up to 150% of basic salary.</p> <p>Judgement as to whether achievements in a calendar year are considered to be exceptional is at the discretion of the Committee.</p>	<p>The Committee retains the ability to set performance objectives annually.</p> <p>These objectives can be group-based and/or individual, financial and/or non-financial, and are likely to include milestones linked to:</p> <ul style="list-style-type: none"> <li>• successful execution of key elements of pipeline development programmes;</li> <li>• progress with clinical trials programmes;</li> </ul>

ADAPTIMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
 For the year ended 31 December 2018

Element of Remuneration	Purpose and link to strategy	Operation	Maximum	Performance targets
				<ul style="list-style-type: none"> <li>• key regulatory steps (IND grants, regulatory approvals);</li> <li>• progress with business development activities;</li> <li>• the Group's financial position and equity liquidity and valuation.</li> </ul>
				<p>A number of these objectives are considered to be commercially sensitive and are therefore not disclosed here in detail.</p>

ADAPTIMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

Element of Remuneration	Purpose and link to strategy	Operation	Maximum	Performance targets
Long term equity incentives	<p>Motivates and rewards multi-year performance, encouraging achievement of strategy over the medium to long term.</p> <p>Aligns the interests of our Executive Directors and Senior Executives with those of our shareholders.</p> <p>Encourages retention as entitlement to full benefits arising from equity-based awards only accrues over a period of years.</p> <p>Enables us to compete with equity-based remuneration offered by a set of comparable companies with whom we may compete for executive talent.</p>	<p>Under our share option schemes, the Committee is able to grant awards of CSOP options in the UK, and unapproved share options (non-qualifying options) in the UK and US, which includes the ability to grant RSU-style awards. All awards may be subject to performance targets.</p> <p>The Committee generally grants equity-based remuneration to Executive Directors and Senior Executives at the time they commence employment and from time to time thereafter based on performance.</p> <p>The Committee is able to grant share options which permit phased vesting over the period. Currently, awards vest over a period of four years, with the first 25% vesting after 12 months.</p>	<p>There is no fixed annual maximum limit to the size or value of equity-based compensation awards made in a year to Executive Directors and Senior Executives, or in the aggregate over a period of years.</p> <p>However, the Committee will always work within benchmarking guidelines provided by our compensation consultants. Additionally, our option scheme rules set a maximum limit on the grant of options to all participants of 8% of our initial issued share capital on the date of our IPO increased by 4% on each 30 June to be effective from 1 July 2016.</p> <p>Expected values are calculated in accordance with generally accepted methodologies based on Black-Scholes models.</p>	<p>Generally, we grant equity-based remuneration awards that vest over time without specific performance targets other than continued service.</p> <p>When making awards, the Committee considers: the size and value of past awards; the performance of the Executive Director or Senior Executive; and competitive data on awards made to executives at comparable companies.</p> <p>Our Severance Policy entitles the Executive Director and Senior Executives to accelerated vesting of options on termination without cause on a change of control.</p>

ADAPTIMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

Element of Remuneration	Purpose and link to strategy	Operation	Maximum	Performance targets
			We seek to establish equity-based remuneration to be reasonably competitive to that offered by a set of comparable companies with whom we may compete for executive talent.	<p>Additionally, the Board has discretion to accelerate vesting of options including in connection with a change of control event or when an Executive Director's service is terminated on account of disability or death.</p> <p><i>See Policy on Payments for Loss of Office.</i></p>

**Notes to policy tables**

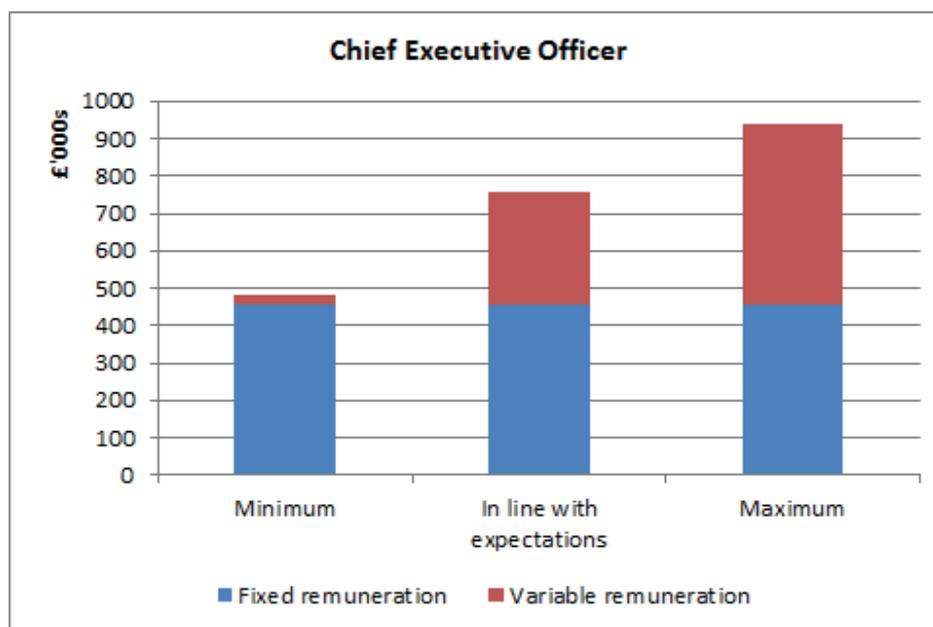
- (1) The use of time-based vesting for share option awards is consistent with U.S. practice, to which we look for guidance on our policies. We examine, with assistance from Willis Towers Watson, our independent remuneration consultant, comparative data on both a (i) fair market value basis and (ii) percentage of salary basis. The Committee uses a blend of the two methods to establish appropriate levels of equity-based remuneration for the Executive Director and Senior Executives.

**Application of the Remuneration Policy to Executive Director Remuneration for the year ending 31 December 2019**

The following table provides an illustration of the potential remuneration for the year ending 31 December 2019 for the CEO, as the sole Executive Director, computed in accordance with the Remuneration Policy outlined above and by applying the following assumptions:

Minimum	The base salary for the Executive Director is assumed to be the base salary of £457,126 per annum effective from 1 January 2019.
	The value of benefits receivable for the year ending 31 December 2019 is assumed to be 5% of base salary for a pension allowance payment and the same rate of contribution for private health insurance as for 2018.
	No bonus is assumed for the Executive Director.
In line with expectations	The same components for base salary and benefits as reflected for the minimum above.
	The expected level of bonus is taken to be 60% of base salary, being the target level of bonus payment for the year ending 31 December 2019.
Maximum	The same components for base salary and benefits as reflected for the minimum above.
	The maximum level of bonus is taken to be 100% of current base salary.

The bar chart below does not include any value for equity-based award remuneration in either the minimum illustration or the illustration of remuneration in line with expectations. We do not believe it is possible to reasonably quantify the value that might result from outstanding options and other equity-based awards.



**Service Contracts**

It is Group policy that Executive Directors should have contracts with an indefinite term providing for a maximum of up to 12 months' notice. We currently employ our CEO, our sole Executive Director, on a service agreement providing for termination, other than for cause, upon nine months' advance notice by either the Company or the CEO. The CEO is

required to resign his position as a Director if the Board requires a resignation in conjunction with the end of the employment relationship. We expect service contracts with future Executive Directors will have comparable provisions.

On termination of the service contract without cause, we have the right to require the Executive Director to take garden leave for all or part of the notice period (the remaining term of the contract) and we have the right to pay salary and benefits in lieu of notice. During the period of any garden leave, the Executive Director must continue to be available to the Company and will continue to receive his full salary and other contractual entitlements. The Company may terminate the Executive Director's employment with immediate effect in certain circumstances including bankruptcy, criminal convictions, gross misconduct or serious or repeated breaches of obligations of his service. In the event of termination of the Executive Director for cause, we are not obligated to make any payment in lieu of notice. The service agreement contains non-solicitation and non-competition provisions for a 12 month period as well as confidentiality provisions.

#### ***Policy on Payments for Loss of Office***

Our approach to payments in the event of termination of an Executive Director is to take account of the individual circumstances including the reason for termination, individual performance, contractual obligations and the terms of the long-term incentive plans in which the Executive Director participates.

As previously reported in our approved Directors' Remuneration Report for the year ended 31 December 2016, and subsequent reports, during March 2017, the Company entered into an amended service agreement with our Executive Director and adopted an executive severance policy that is applicable to our Executive Director and senior executive officers on termination other than for cause. The amended service agreement and executive severance policy are compliant with our last approved Directors' Remuneration Policy. In particular, all employment arrangements for any Executive Director(s) will continue to include a notice provision and continuing payment obligations for not more than a maximum period of one year following our termination of an Executive Director other than for cause. Payment obligations would include base salary, bonus and benefits. In the event of termination without cause following a change of control, the Executive Director is entitled to accelerated vesting of any unvested and outstanding equity awards. In addition, the Board has discretion under our option scheme rules to allow some or all of the options held by our Executive Director and senior executives to vest in the event of a change of control or otherwise.

In order to receive severance benefits under the employment agreement and executive severance policy, the Executive Director is required to execute a release of claims in favour of the Company and comply with certain other post-employment covenants set forth in his employment agreement.

We will comply with applicable disclosure and reporting requirements of the Securities and Exchange Commission with respect to remuneration arrangements with a departing Executive Director.

#### ***Policy on Recruitment Arrangements***

Our policy is to pay a fair remuneration package for the role being undertaken and the experience of the individual to be appointed. We expect remuneration packages will include base salary, targeted level of annual cash incentive, initial and ongoing equity-based awards, standard benefits and special provisions tailored to the recruiting situation, such as: sign-on bonus, reasonable relocation support and make-whole awards for remuneration forfeited from a prior employer (whether on account of cash bonuses, share awards, pension benefits or other forfeited items).

The Board retains the discretion to provide additional benefits where necessary or useful to recruit new Executive Directors or to secure the ongoing service of existing Executive Directors.

If we appoint an existing employee as an Executive Director of the Company, we would expect to retain legacy obligations to the employee with respect to remuneration, such as outstanding share awards. Should these differ materially from current arrangements, these will be disclosed in the next Directors' Remuneration Report following such appointment. We will also disclose remuneration details for a new Executive Director in accordance with applicable reporting requirements of the Securities and Exchange Commission.

ADAPTIMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

**Summary of remuneration policy – Non-Executive Directors**

Under the last approved Directors' Remuneration policy, the Board has the discretion to pay fees to any or all Non-Executive Directors and/or to pay Non-Executive Directors in the form of a mixture of cash and share options. Our remuneration arrangements for Non-Executive Directors continue to comprise an award of a fixed number of share options, plus an additional number of share options or cash payment at the Director's election. The option awards and cash payments made in 2018 were established at competitive levels taking into account peer data from comparable companies provided in a benchmarking analysis undertaken by Willis Towers Watson in 2018 and are compliant with the last approved Directors' Remuneration policy.

The Committee has retained Willis Towers Watson to assist the Committee in ensuring that our remuneration arrangements for the Non-Executive Directors are competitive and appropriate by benchmarking them against comparable publicly traded biopharmaceutical companies, with an increasing focus on U.S. benchmarks and practices. We expect to continue to use remuneration consultants to assist the Committee in determining competitive levels of Non-Executive Director remuneration and specific design elements of our Non-Executive Director remuneration programme.

Our Non-Executive Directors participate in the Group's long-term incentive plans on terms similar to those used for Executive Directors. In accordance with their Letters of Appointment, each Non-Executive Director is entitled to receive an annual award of share options, and incoming Non-Executive Directors receive an initial award of share options, and which may include RSU-style awards, with such number to be determined by the Board. In determining option awards, the Board works within benchmarking guidelines provided by remuneration consultants.

Any share options that are awarded will not be subject to performance conditions.

Our Non-Executive Directors do not receive any pension from the Company nor do they participate in any performance-related incentive plans.

The following table presents the elements of remuneration for Non-Executive Directors.

Element of Remuneration	Purpose and link to strategy	Operation	Maximum
Non-Executive fees	<p>Reflects time commitments and responsibilities of each role.</p> <p>Reflects fees paid by similarly sized companies.</p>	<p>The remuneration of the Non-Executive Directors will be determined by the Board as a whole by reference to market practice and market data, on which the Committee receives independent advice, and reflects individual experience, scope of the role, time commitment and changes to responsibilities.</p> <p>We typically expect to align fees with the 50<sup>th</sup> percentile of peer group comparator data but may vary from this general rule where we consider that special circumstances apply or where recruitment or retention of a particular role is required.</p> <p>Fees will typically consist of a basic fee for Non-Executive Director responsibilities plus incremental fees for additional</p>	<p>The value of each individual's aggregate fees will not exceed the 75<sup>th</sup> percentile of peer group comparator data for the relevant role.</p>

ADAPTIMMUNE THERAPEUTICS PLC  
**DIRECTORS' REMUNERATION REPORT (CONTINUED)**  
For the year ended 31 December 2018

		<p>roles/responsibilities such as chairmanship of Board committees and a senior independent Non-Executive Director role.</p> <p>The Non-Executive Directors may elect to receive the fees in cash or in the form of an award of additional share options.</p> <p>The Non-Executive Directors do not receive any pension from the Company, nor do they participate in any performance-related incentive plans.</p>	
Long term equity incentives	<p>For public companies listed in the United States, equity-based remuneration is a standard component of Director remuneration.</p> <p>We extend equity-based awards to our Non-Executive Directors in order to be competitive with comparable companies seeking qualified Directors and to align the interests of our Non- Executive Directors with those of our shareholders.</p>	<p>Non-Executive Directors participate in the Group's long-term incentive plans on terms similar to those used for Executive Directors.</p> <p>Under their appointment letters, each Non-Executive Director is entitled to receive an annual award of options, provided that he or she continues to serve as a Director. When a new Non-Executive Director is appointed, he or she may receive an initial award of options. In either scenario, these may include RSU-style awards.</p> <p>The Board is able to grant share options which permit phased vesting over the period. Currently, options awarded to new Directors become fully exercisable over three years while options awarded annually are exercisable on the first anniversary of the date of grant. Any share options awarded will not be subject to performance conditions. Expected values are calculated in accordance with generally accepted methodologies based on Black-Scholes models.</p>	<p>Not applicable.</p> <p>The option awards will be determined by the Board as a whole working within benchmarking guidelines provided by our compensation consultants. Additionally, our option scheme rules set a maximum limit on the grant of options to all participants of 8% of our initial issued share capital on the date of our IPO increased by 4% on each 30 June effective from 1 July 2016.</p>

***Letters of Appointment***

The Chairman and all other Non-Executive Directors have letters of appointment which set out the terms under which they provide their services to the Company and which are subject to a three month notice period either by the Company or the Non-Executive Director. Their remuneration is reviewed by the Board annually. In accordance with the Company's Articles of Association, Non-Executive Directors are included in the requirement that one-third of Directors are subject to retirement by rotation at each Annual General Meeting of shareholders. There is no remuneration payable on loss of office when, for example, a Director is not re-elected at an Annual General Meeting.

***Statement of Consideration of Employment Conditions and Differences to the Executive Director Policy***

All our employees are paid a base salary and receive standard employee benefits, which vary according to whether they are employed in the UK or in the US but all are entitled to a contribution from the Group towards a pension scheme or retirement plan, as well as access to health insurance and income protection.

All employees are eligible to be considered for an annual increase in their base salaries, provided they have worked for a sufficient portion of the prior fiscal year. In addition, all employees are eligible to be considered for target annual cash bonus awards, subject to the achievement of objectives and to the overall performance of the Company, and for consideration for regular option awards. Eligibility is dependent on the employee's position and performance, with more senior employees eligible for higher bonus and option award levels.

No specific consultation with employees has been undertaken in respect of the design of the Company's senior executive remuneration policy to date although the Committee will keep this under review.

***Statement of Consideration of Shareholder Views***

This policy for remuneration of both Executive Directors and Non-Executive Directors was devised by a Remuneration Committee of which all members are Non-Executive Directors. The policy was also approved by the full Board.

***Approval***

This report was approved by the Board of Directors on 26 February 2019 and signed on its behalf by:



**David M Mott**  
Director

26 February 2019

The directors are responsible for preparing the Annual Report and the Group and parent Company financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare Group and parent Company financial statements for each financial year. Under that the law and as permitted by the NASDAQ the directors have elected to prepare the Group financial statements in accordance with International Financial Reporting Standards as adopted by the European Union (IFRSs as adopted by the EU) and applicable law and they have elected to prepare the parent Company financial statements in accordance with UK accounting standards and applicable law (UK Generally Accepted Accounting Practice), including FRS 101 *Reduced Disclosure Framework*.

Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and parent Company and of their profit or loss for that period. In preparing each of the Group and Parent company financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable, relevant, reliable and prudent;
- for the Group financial statements, state whether they have been prepared in accordance with IFRSs as adopted by the EU;
- for the parent Company financial statements, state whether applicable UK accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- assess the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the parent Company and enable them to ensure that its financial statements comply with the Companies Act 2006. They are responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

The directors have prepared a Directors' Remuneration Report in accordance with Schedule 8 to The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 made under the Companies Act 2006.

Under applicable law and regulations, the directors are also responsible for preparing a Strategic Report, a Directors' Report and a Directors' Remuneration Report that complies with that law and those regulations.

## **1 Our opinion is unmodified**

We have audited the financial statements of Adaptimmune Therapeutics plc ("the Company") for the year ended 31 December 2018 which comprise the Consolidated Income Statement, Consolidated Statement of Financial Position, Company Statement of Financial Position, Consolidated Statement of Changes in Equity, Company Statement of Changes in Equity, Consolidated Statement of Cash Flows, and the related notes, including the accounting policies in note 1.

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the parent Company's affairs as at 31 December 2018 and of the Group's loss for the year then ended;
- the group financial statements have been properly prepared in accordance with International Financial Reporting Standards as adopted by the European Union;
- the parent Company financial statements have been properly prepared in accordance with UK accounting standards, including FRS 101 *Reduced Disclosure Framework*; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

### ***Basis for opinion***

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We have fulfilled our ethical responsibilities under, and are independent of the Group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to listed entities. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion.

## **2 Key audit matters: including our assessment of risks of material misstatement**

Key audit matters are those matters that, in our professional judgment, were of most significance in the audit of the financial statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

	<i>The risk</i>	<i>Our response</i>
<p><b>The impact of uncertainties due to the UK exiting the European Union on our audit</b></p> <p>Refer to page 23 (principal risks).</p>	<p><b>Unprecedented levels of uncertainty</b></p> <p>All audits assess and challenge the reasonableness of estimates, related disclosures and the appropriateness of the going concern basis of preparation of the financial statements below. All of these depend on assessments of the future economic environment and the group’s future prospects and performance. Brexit is one of the most significant economic events for the UK and at the date of this report its effects are subject to unprecedented levels of uncertainty of outcomes, with the full range of possible effects unknown.</p>	<p>We developed a standardised firm-wide approach to the consideration of the uncertainties arising from Brexit in planning and performing our audits.</p> <p>Our procedures included:</p> <ul style="list-style-type: none"> <li>• <b>Our Brexit knowledge</b> – We considered the directors’ assessment of Brexit-related sources of risk for the group’s business and financial resources compared with our own understanding of the risks. We considered the directors’ plans to take action to mitigate the risks.</li> <li>• <b>Sensitivity analysis</b> – When addressing areas that depend on forecasts, we compared the directors’ analysis to our assessment of the full range of reasonably possible scenarios resulting from Brexit uncertainty and, where forecast cash flows are required to be discounted, considered adjustments to discount rates for the level of remaining uncertainty.</li> <li>• <b>Assessing transparency</b> – We considered all of the Brexit related disclosures together, including those in the strategic report, comparing the overall picture against our understanding of the risks.</li> </ul>

<p><b>IFRS opening balance restatement</b></p> <p>(\$8.6 million; 2017: \$0.0 million) Refer to page 69 (accounting policy).</p>	<p><b>Accounting application</b></p> <p>The new accounting policies require the exercise of judgement across a number of areas and this gives rise to a significant audit risk.</p>	<p><i>Our procedures included:</i></p> <ul style="list-style-type: none"> <li>• <b>Assessing principles:</b> We conducted a detailed assessment of the accounting policy papers prepared by the Directors that detailed the new policies to be applied. These papers set out the Directors’ interpretation of the requirements and key judgements made. We considered any alternative interpretations and assessed the appropriateness of the new policies and challenged the Directors on key assumptions made using our knowledge of Group.</li> <li>• <b>Test of detail:</b> We substantively tested the restatement of the opening consolidated balance sheet as at 1 January 2018 and the consolidated income statement for the year ended 31 December 2018. This testing included: <ul style="list-style-type: none"> <li>• Reading the GSK Collaboration Agreement (“Agreement”) and held discussions with the Directors to gain an understanding of the Agreement and specific milestones required to be met.</li> <li>• Challenged the Directors on the assumptions, particularly the forecast costs to complete and the probability of achieving future developmental milestones, used in the forecast.</li> <li>• Retrospective testing to validate whether performance milestones were historically achieved.</li> </ul> </li> </ul> <p>- <b>Assessing transparency:</b> We assessed whether the Group’s disclosure provided sufficient detail of the impacts applying the new standard, and of the key judgements applied under the new policies adopted.</p>
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<p><b>Recoverability of the parent company's investment in subsidiary and of the amounts owed by group entities</b></p> <p>(Investments: \$118.1 million; 2017: \$104.8m) (Amounts due from group entities: \$227.7 million; 2017: \$274.0m)</p> <p>Refer to pages 66 and 67 (accounting policy) and pages 82 and 83 (financial disclosures).</p>	<p><b>Low risk, high value Investments</b></p> <p>The carrying amount of the parent company's investment in the subsidiary and amounts owed by group entities represent 23.6% (2017: 27.6%) and 45.2% (2017: 72.1%), respectively of the company's total assets.</p> <p>Their recoverability is not at a high risk of significant misstatement or subject to significant judgement. However, due to its materiality in the context of the parent company financial statements, these are considered to be the areas that had the greatest effect on our overall parent company audit.</p>	<p><i>Our procedures included:</i></p> <p><b>Tests of detail:</b> Compared the aggregate of the carrying amount of the investment and amounts owed by group entities to the adjusted market capitalisation as at 15 February 2019, which is an approximation of the minimum recoverable amount of the aggregation of the investment and amounts owed by group entities, to assess whether it was in excess of the aggregated carrying amount.</p>
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### 3 Our application of materiality and an overview of the scope of our audit

Materiality for the Group financial statements as a whole was set at \$6.0m for the year ended 31 December 2018 (2017: \$4.0m), determined with reference to a benchmark of Group Loss Before Tax, normalised to exclude this year's Licence Revenue as disclosed in note 2, of \$146,4m (2017: \$74.6m). Materiality represents 4.1% of normalised loss for the year (2017: 5.4%). The benchmark is consistent with prior year.

Materiality for the Parent Company financial statements as a whole was set at \$4.5m for the year ended 31 December 2018 (2017: \$2.0m) determined with reference to a benchmark of Total Assets of \$501.3m (2017: \$380.8m), of which it represents 0.9% (2017: 0.5%). The benchmark is consistent with prior year.

We agreed to report to the Audit Committee any corrected or uncorrected identified misstatements exceeding \$0.2m (2017: \$0.2m), in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the 3 (2017: 3) components which report to group, we subjected 3 (2017: 3) to full scope audits for Group reporting purposes. The components within the scope of our work accounted for 100% of Group revenue, loss before tax and total assets. The Group audit team carried out the audits of all 3 components (2017: 3), which includes the audit of the parent company, according to the following component materialities, having regard to the mix of size and risk profile of the Group across the components:

- Adaptimmune Limited: \$4.5 million (2017: \$3.1 million)
- Adaptimmune LLC: \$3.0 million (2017: \$2.7 million)

The Group team visited 2 (2017: 2) component locations in UK and USA (2017: UK and USA).

### 4 We have nothing to report on going concern

The Directors have prepared the financial statements on the going concern basis as they do not intend to liquidate the Company or the Group or to cease their operations, and as they have concluded that the Company's and the Group's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over their ability to continue as a going concern for at least a year from the date of approval of the financial statements ("the going concern period").

Our responsibility is to conclude on the appropriateness of the Directors' conclusions and, had there been a material uncertainty related to going concern, to make reference to that in this audit report. However, as we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the absence of reference to a material uncertainty in this auditor's report is not a guarantee that the group or the company will continue in operation.

In our evaluation of the Directors' conclusions, we considered the inherent risks to the Group's and Company's business model and analysed how those risks might affect the Group's and Company's financial resources or ability to continue operations over the going concern period. The risks that we considered most likely to adversely affect the Group's and Company's available financial resources over this period were:

- Significant development cost overruns on the remaining wholly owned programs - MAGE-A10, MAGE-A4, and AFP.
- The ability to successfully advance MAGE-A10, MAGE-A4 and the timing within which they can recruit patients and treat patients in their clinical trials
- The ability to secure future funding to support research and development activities
- The impact of a disorderly Brexit on the Group's supply chain, or the ability to secure sponsorship for EU based clinical trials.

As these were risks that could potentially cast significant doubt on the Group's and the Company's ability to continue as a going concern, we considered sensitivities over the level of available financial resources indicated by the Group's financial forecasts taking account of reasonably possible (but not unrealistic) adverse effects that could arise from these risks individually and collectively and evaluated the achievability of the actions the Directors consider they would take to improve the position should the risks materialise. We also considered less predictable but realistic second order impacts, such as the impact of a disorderly Brexit, which could result in a rapid reduction of available financial resources.

Based on this work, we are required to report to you if we have concluded that the use of the going concern basis of accounting is inappropriate or there is an undisclosed material uncertainty that may cast significant doubt over the use of that basis for a period of at least a year from the date of approval of the financial statements.

We have nothing to report in these respects, and we did not identify going concern as a key audit matter.

## **5 We have nothing to report on the other information in the Annual Report**

The directors are responsible for the other information presented in the Annual Report together with the financial statements. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in the other information.

### ***Strategic report and directors' report***

Based solely on our work on the other information:

- we have not identified material misstatements in the strategic report and the directors' report;
- in our opinion the information given in those reports for the financial year is consistent with the financial statements; and
- in our opinion those reports have been prepared in accordance with the Companies Act 2006.

### ***Directors' remuneration report***

In addition to our audit of the financial statements, the directors have engaged us to audit the information in the Directors' Remuneration Report that is described as having been audited, which the directors have prepared because the company is required to comply with the requirements of Schedule 8 to The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (SI 2008 No. 410) made under the Companies Act 2006.

In our opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

#### **6 We have nothing to report on the other matters on which we are required to report by exception**

Under the Companies Act 2006, we are required to report to you if, in our opinion:

- adequate accounting records have not been kept by the parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent Company financial statements and the part of the Directors' Remuneration Report which we were engaged to audit are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

We have nothing to report in these respects.

#### **7 Respective responsibilities**

##### ***Directors' responsibilities***

As explained more fully in their statement set out on page 49, the directors are responsible for: the preparation of the financial statements including being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; assessing the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

##### ***Auditor's responsibilities***

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

A fuller description of our responsibilities is provided on the FRC's website at [www.frc.org.uk/auditorsresponsibilities](http://www.frc.org.uk/auditorsresponsibilities).

**8 The purpose of our audit work and to whom we owe our responsibilities**

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

*CH LeStrange Meakin*

**Charles Le Strange Meakin (Senior Statutory Auditor)**  
**for and on behalf of KPMG LLP, Statutory Auditor**  
*Chartered Accountants*  
Arlington Business Park  
Theale,  
RG7 4SD  
27 February 2019

ADAPT IMMUNE THERAPEUTICS PLC  
**CONSOLIDATED INCOME STATEMENT**

For the year ended 31 December	<i>Note</i>	2018 \$'000	2017 \$'000
<b>Revenue</b>	2	<b>59,505</b>	37,833
Research & development expenses		<b>(115,242)</b>	(96,381)
Administrative expenses		<b>(48,286)</b>	(30,229)
Other income	3	<b>1,449</b>	1,581
		<b>(162,079)</b>	(125,029)
<b>Operating loss</b>	4	<b>(102,574)</b>	(87,196)
Finance income	7	<b>2,849</b>	7,273
Finance expense	7	<b>(7,992)</b>	(529)
<b>Loss before tax</b>		<b>(107,717)</b>	(80,452)
Taxation credit	8	<b>16,162</b>	9,144
<b>Loss for the period</b>		<b>(91,555)</b>	(71,308)
<b>Basic and diluted loss per share</b>	1	<b>(0.16)</b>	(0.14)
Weighted average number of shares used to calculate basic and diluted loss per share	1	<b>584,338,942</b>	527,637,086

**CONSOLIDATED STATEMENT OF COMPREHENSIVE LOSS**

For the year ended 31 December	2018 \$'000	2017 \$'000
<b>Loss for the period</b>	<b>(91,555)</b>	(71,308)
<b>Other comprehensive loss for the period, net of income tax</b>		
<i>Items that are or may be reclassified subsequently to profit or loss:</i>		
Foreign exchange translation differences	<b>8,261</b>	(3,115)
Net change in fair value of financial assets at fair value through OCI (2017: available-for-sale financial assets)	<b>62</b>	(218)
<b>Total comprehensive loss for the period</b>	<b>(83,232)</b>	(74,641)

All of the above figures relate to continuing operations.

The notes on pages 63 to 99 form part of these financial statements

ADAPTIMMUNE THERAPEUTICS PLC  
**CONSOLIDATED STATEMENT OF FINANCIAL POSITION**

Company Number 09338148

As of year ended 31 December	Note	2018 \$'000	2017 \$'000
<b>Assets</b>			
<b>Non-current assets</b>			
Property, plant & equipment	9	36,118	40,679
Intangibles	10	7,686	7,404
Clinical materials		3,953	4,695
Restricted cash	13	4,097	4,253
<b>Total non-current assets</b>		<b>51,854</b>	<b>57,031</b>
<b>Current assets</b>			
Other current assets	14	9,310	9,889
Trade and other receivables	15	192	579
Tax receivable		16,459	11,454
Financial assets at fair value through OCI (2017: available-for-sale financial assets)	21	136,755	124,218
Cash and cash equivalents	17	68,379	84,043
<b>Total current assets</b>		<b>231,095</b>	<b>230,183</b>
<b>Total assets</b>		<b>282,949</b>	<b>287,214</b>
<b>Equity &amp; liabilities</b>			
<b>Equity</b>			
Share capital	18	939	854
Share premium		381,903	279,298
Other reserve		131,013	131,013
Accumulated Other comprehensive income		(17,034)	(25,357)
Retained losses		(243,722)	(176,757)
<b>Total Equity</b>		<b>253,099</b>	<b>209,051</b>
<b>Non-Current liabilities</b>			
Trade and other payables	19	5,414	3,849
<b>Total Non-Current liabilities</b>		<b>5,414</b>	<b>3,849</b>
<b>Current liabilities</b>			
Trade and other payables	20	24,436	74,314
Tax payable		—	—
<b>Total current liabilities</b>		<b>24,436</b>	<b>74,314</b>
<b>Total equity &amp; liabilities</b>		<b>282,949</b>	<b>287,214</b>

The notes on pages 63 to 99 form part of these Financial Statements

The financial statements on pages 57 to 99 were approved by the Board of Directors on 26 February 2019 and are signed on its behalf by:



**James J Noble**  
 Director  
 26 February 2019

As of year ended 31 December	Note	2018 \$'000	2017 \$'000
<b>Assets</b>			
<b>Non-current assets</b>			
Investments in subsidiaries	11	118,062	104,827
Financial assets at amortised cost	12	219,056	269,619
<b>Total non-current assets</b>		<b>337,118</b>	374,446
<b>Current assets</b>			
Prepayments		250	196
Trade and other receivables	15	8,692	4,382
Financial assets at fair value through OCI	21	136,755	—
Cash and cash equivalents		19,461	799
<b>Total current assets</b>		<b>165,158</b>	5,377
<b>Total assets</b>		<b>502,276</b>	379,823
<b>Equity &amp; liabilities</b>			
<b>Equity</b>			
Share capital	18	939	854
Share premium		381,903	279,298
Other reserves		79,990	79,990
Accumulated Other comprehensive income		(156)	—
Retained earnings		37,640	19,115
<b>Total Equity</b>		<b>500,316</b>	379,257
<b>Current liabilities</b>			
Trade and other payables	20	1,960	566
<b>Total equity &amp; liabilities</b>		<b>502,276</b>	379,823

The notes on pages 63 to 99 form part of these Financial Statements

The financial statements on pages 57 to 99 were approved by the Board of Directors on 26 February 2019 and are signed on its behalf by:



**James J Noble**  
 Director

26 February 2019

ADAPTIMMUNE THERAPEUTICS PLC  
**CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**

	<u>Share Capital</u> \$'000	<u>Share Premium</u> \$'000	<u>Other reserve</u> \$'000	<u>Exchange reserve</u> \$'000	<u>Fair value reserves</u> \$'000	<u>Retained Losses</u> \$'000	<u>Total equity</u> \$'000
Balance at 1 January 2017	683	175,901	131,013	(22,024)	—	(114,806)	170,767
<i>Total comprehensive loss for the period:</i>							
Loss for the period	—	—	—	—	—	(71,308)	(71,308)
Other comprehensive loss for the period	—	—	—	(3,115)	(218)	—	(3,333)
Issuance of common stock, net of issuance costs	170	102,997	—	—	—	—	103,167
Issuance of common stock upon exercise of options	1	400	—	—	—	—	401
<i>Transactions with owners, recorded directly in equity:</i>							
Equity-settled share based payment expense	—	—	—	—	—	9,357	9,357
<b>Balance at 31 December 2017</b>	<u>854</u>	<u>279,298</u>	<u>131,013</u>	<u>(25,139)</u>	<u>(218)</u>	<u>(176,757)</u>	<u>209,051</u>
Change in accounting policy	—	—	—	—	—	8,645	8,645
Balance at 1 January 2018	854	279,298	131,013	(25,139)	(218)	(168,112)	217,696
<i>Total comprehensive loss for the period:</i>							
Loss for the period	—	—	—	—	—	(91,555)	(91,555)
Other comprehensive loss for the period	—	—	—	8,261	62	—	8,323
Issuance of common stock, net of issuance costs	78	99,575	—	—	—	—	99,653
Issuance of common stock upon exercise of options	7	3,030	—	—	—	—	3,037
<i>Transactions with owners, recorded directly in equity:</i>							
Equity-settled share based payment expense	—	—	—	—	—	15,945	15,945
<b>Balance at 31 December 2018</b>	<u>939</u>	<u>381,903</u>	<u>131,013</u>	<u>(16,878)</u>	<u>(156)</u>	<u>(243,722)</u>	<u>253,099</u>

The notes on pages 63 to 99 form part of these Financial Statements

ADAPTIMMUNE THERAPEUTICS PLC  
**COMPANY STATEMENT OF CHANGES IN EQUITY**

	<u>Share Capital</u> \$'000	<u>Share Premium</u> \$'000	<u>Other Reserve</u> \$'000	<u>Fair value reserves</u> \$'000	<u>Retained Earnings</u> \$'000	<u>Total Equity</u> \$'000
Balance at 1 January 2017	683	175,901	79,990	—	8,345	264,919
<i>Total comprehensive loss for the year:</i>						
Loss for the year	—	—	—	—	1,413	1,413
<i>Transactions with owners, recorded directly in equity:</i>						
Issue of common stock	170	102,997	—	—	—	103,167
Shares issued upon exercise of stock options	1	400	—	—	—	401
Equity-settled share based payment expense	—	—	—	—	9,357	9,357
<b>Balance at 31 December 2017</b>	<b><u>854</u></b>	<b><u>279,298</u></b>	<b><u>79,990</u></b>	<b><u>—</u></b>	<b><u>19,115</u></b>	<b><u>379,257</u></b>
Balance at 1 January 2018	854	279,298	79,990	—	19,115	379,257
<i>Total comprehensive loss for the year:</i>						
Profit for the year	—	—	—	—	2,580	2,580
Other comprehensive loss for the period	—	—	—	(156)	—	(156)
<i>Transactions with owners, recorded directly in equity:</i>						
Issuance of common stock, net of issuance costs	78	99,575	—	—	—	99,653
Issuance of common stock upon exercise of options	7	3,030	—	—	—	3,037
<i>Transactions with owners, recorded directly in equity:</i>						
Equity-settled share based payment expense	—	—	—	—	15,945	15,945
<b>Balance at 31 December 2018</b>	<b><u>939</u></b>	<b><u>381,903</u></b>	<b><u>79,990</u></b>	<b><u>(156)</u></b>	<b><u>37,640</u></b>	<b><u>500,316</u></b>

The notes on pages 63 to 99 form part of these Financial Statements

ADAPT IMMUNE THERAPEUTICS PLC  
**CONSOLIDATED STATEMENT OF CASH FLOWS**

For the year ended 31 December	<i>Note</i>	2018 \$'000	2017 \$'000
<b>Cash flows from operating activities</b>			
Loss for the period before tax		(107,717)	(80,452)
<i>Adjustments for:</i>			
Depreciation	9	7,188	5,032
Amortisation	10	622	391
Equity-settled share based payment expense	23	15,945	9,357
Realized losses on maturity or redemption of financial assets at fair value through OCI (2017: available-for-sale financial assets)		2,473	646
Unrealized foreign exchange gains		6,191	(5,043)
Bank interest income	7	(2,849)	(2,230)
Other		(36)	1,006
<i>Changes in:</i>			
Decrease (increase) in other current and other non-current assets		551	(3,314)
Decrease in trade and other receivables		742	2,115
(Decrease) increase in trade and other payables		(40,923)	12,439
<b>Cash used in operations</b>		<b>(117,814)</b>	<b>(60,053)</b>
Net taxes received		10,457	4,893
Interest received		3,114	1,784
<b>Net cash used in operating activities</b>		<b>(104,242)</b>	<b>(53,376)</b>
<b>Cash flows from investing activities</b>			
Acquisition of property, plant & equipment		(3,910)	(24,643)
Acquisition of intangibles		(944)	(1,308)
Proceeds from disposal of property, plant & equipment		—	550
Investment in short-term deposits		—	(18,000)
Maturity of short-term deposits		—	40,625
Investment in financial assets at fair value through OCI (2017: available-for-sale financial assets)		(150,787)	(153,334)
Maturity of financial assets at fair value through OCI (2017: available-for-sale financial assets)		138,038	29,090
<b>Net cash used in investing activities</b>		<b>(17,603)</b>	<b>(127,020)</b>
<b>Net cash from financing activities</b>			
Proceeds from issuance of common stock		99,653	103,167
Proceeds from exercise of share options		3,037	401
<b>Net cash generated by financing activities</b>		<b>102,690</b>	<b>103,568</b>
Net decrease in cash and cash equivalents		(19,155)	(76,827)
Effect of movements in exchange rates on cash held		3,491	2,092
Cash and cash equivalents at start of period		84,043	158,779
<b>Cash and cash equivalents at period end</b>		<b>68,379</b>	<b>84,043</b>

The notes on pages 63 to 99 form part of these Financial Statements

## 1. ACCOUNTING POLICIES

### *(a) Domicile*

Adaptimmune Therapeutics plc is registered in England and Wales. Its registered office is 60 Jubilee Avenue, Milton Park, Abingdon, Oxfordshire OX14 4RX.

The Group and its subsidiaries (the “Group”) are a clinical-stage biopharmaceutical group focused on novel cancer immunotherapy products based on its T-cell receptor platform. It has developed a comprehensive proprietary platform that enables it to identify cancer targets, find and genetically engineer T-cells receptors, or TCRs, and produce TCR therapeutic candidates for administration to patients. The Group engineers TCRs to increase their affinity to cancer specific peptides in order to destroy cancer cells in patients.

The Group is subject to a number of risks similar to other biopharmaceutical companies in the early stage, including, but not limited to, the need to obtain adequate additional funding, possible failure of preclinical programmes or clinical trials, the need to obtain marketing approval for its TCR therapeutic candidates, competitors developing new technological innovations, the need to successfully commercialize and gain market acceptance of the Group’s TCR therapeutic candidates, and protection of proprietary technology. If the Group does not successfully commercialize any of its TCR therapeutic candidates, it will be unable to generate product revenue or achieve profitability. As at 31 December 2018, the Group had retained losses of approximately \$243.7 million.

### *(b) Statement of Compliance*

The consolidated financial statements have been prepared and approved by the Directors in accordance with International Financial Reporting Standards (“IFRS”) as adopted by the EU and in compliance with IFRSs issued by the IASB.

The separate financial statements of the Company are drawn up in accordance with the Companies Act 2006 and Financial Reporting Standard 101. On publishing the parent company financial statements here together with the group financial statements, the Company is taking advantage of the exemption in s408 of the Companies Act 2006 not to present its individual income statement, cash flow statement and related notes that form a part of these approved financial statements.

### *(c) Basis of Preparation*

The financial statements have been prepared on the historical cost basis except as required by the accounting standards. The consolidated financial statements of Adaptimmune Therapeutics plc and its subsidiaries, Adaptimmune Limited and Adaptimmune LLC and the financial statements for Adaptimmune Therapeutics plc included herein are for the years ended 31 December 2018 and 2017.

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these financial statements.

### *(d) Going Concern*

The Group’s business activities, together with the factors likely to affect its future development, performance and position are set out in the Strategic Report on pages 10 to 26. The financial position of the Group, its cash flows, liquidity position and borrowing facilities are described in the primary statements and notes of this set of financial statements. In addition, note 21 includes the Group’s objectives, policies and processes for managing its capital and its financial risk management objectives.

After making enquiries and considering the Group’s business activities, together with the factors likely to affect its future development, performance and position, the Directors have a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future. Accordingly, they continue to adopt the going concern basis in preparing the annual report and accounts.

## **1. ACCOUNTING POLICIES (CONTINUED)**

### ***(e) Management Estimates and Judgements***

The preparation of the financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions. These judgements, estimates and assumptions affect the reported amounts of assets and liabilities as well as income and expenses in the financial statement provided.

The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. The actual outcome is not expected to differ significantly from the estimates and assumptions made.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or the period of revision and future periods if this revision affects both current and future periods.

### ***(f) Basis of Consolidation***

#### ***Subsidiaries***

Subsidiaries are entities controlled by the Group. Control exists when the Group has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, the Group takes into consideration potential voting rights that are currently exercisable. The acquisition date is the date on which control is transferred to the acquirer. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

#### ***Foreign Currency***

Transactions in foreign currencies are translated to the respective functional currencies of Group entities at the foreign exchange rate in effect at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are retranslated to the functional currency at the foreign exchange rate in effect at that date. Foreign exchange differences arising on translation are recognised in the income statement. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are retranslated to the functional currency at foreign exchange rates ruling at the dates the fair value was determined.

The assets and liabilities of foreign operations are translated to the Group's presentational currency, pounds sterling, at foreign exchange rates in effect at the balance sheet date. The revenues and expenses of foreign operations are translated at an average rate for the year where this rate approximates to the foreign exchange rates in effect at the dates of the transactions. Exchange differences arising from this translation of foreign operations are reported as an item of other comprehensive income and accumulated in the exchange reserve.

### ***(g) Property, Plant and Equipment***

Property, plant and equipment are stated at their purchase cost, together with any incidental expenses of acquisition, less accumulated depreciation.

Depreciation is calculated so as to write off the cost of the assets less their estimated residual values, on a straight line basis over the expected useful economic lives of the assets concerned. Depreciation is not charged on construction in progress until the asset is completed and ready for its intended use.

## 1. ACCOUNTING POLICIES (CONTINUED)

The following table shows the generally applicable expected useful economic life for each category of asset:

Computer equipment	3 to 5 years
Laboratory equipment	5 years
Office equipment	5 years
Leasehold improvements	the shorter of the estimated useful life and the expected duration of the lease

### *(h) Intangibles*

#### *Research and development*

Expenditure on research activities is recognized in the income statement as incurred. Development costs are capitalised only after technical and commercial feasibility of the asset for sale or use have been established. When making this determination the Group considers:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits can be demonstrated;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

Subsequent to initial recognition, development expenditure is measured at cost less accumulated amortization and any accumulated impairment losses.

If the development costs do not meet the criteria for capitalization, the costs are recognized in the income statement as incurred.

The Group currently does not have any development projects which have met the above criteria.

#### *Acquired in-process research and development*

Acquired research and development intangible assets, which are still under development, such in-licensed or acquired compounds, are recognized as In-Process Research & Development (IPR&D). IPR&D assets are stated at their purchase cost, together with any incidental expenses of acquisition.

IPR&D assets are not amortized but evaluated for potential impairment on an annual basis or when facts and circumstances warrant. Impairment charges are recorded in the research & development within the consolidated income statement.

#### *Software licenses*

Acquired computer software licences are capitalised as intangibles assets and stated at costs incurred to acquire and bring to use the specific software. These costs are amortised over their estimated useful lives.

## 1. ACCOUNTING POLICIES (CONTINUED)

### *(i) Investment in Subsidiaries*

Investments in subsidiary undertakings are stated at cost less any impairment. Where management identify uncertainty over such investments, the investment is impaired to an estimate of its net realisable value.

### *(j) Clinical Materials*

Clinical materials with alternative use, which are not held for sale are capitalised as either other current assets or other non-current assets, depending on the timing of their expected consumption.

### *(k) Impairment of Non-financial Assets Excluding Inventories and Deferred Tax Assets*

The carrying amounts of the Group's non-financial assets, other than inventories and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. For intangible assets that have indefinite useful lives or that are not yet available for use, the recoverable amount is estimated each period at the same time.

### *(l) Financial Instruments (after the adoption of IFRS 9, Financial Instruments ("IFRS 9"))*

On 1 January 2018, the Group adopted new guidance on financial instruments included in IFRS 9.

#### (i) Classification

From 1 January 2018, the Group classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through other comprehensive income ("OCI") or through profit or loss); and
- those to be measured at amortised cost.

The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows. For assets measured at fair value, gains and losses will either be recorded in profit or loss or OCI. The group reclassifies debt investments when and only when its business model for managing those assets changes.

#### (ii) Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade-date, the date on which the group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the group has transferred substantially all the risks and rewards of ownership.

#### (iii) Measurement

At initial recognition, the group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit and loss are expensed in profit or loss.

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. The Group's debt securities are held for collection of cash flows where those cash flow represent solely payments of principal and interest and to manage liquidity. As of 31 December 2018, the Group has invested in debt securities, including corporate debt securities and commercial paper, and money market funds. The debt securities are subsequently measured at fair value through OCI. Interest income from these financial assets is included in

## 1. ACCOUNTING POLICIES (CONTINUED)

finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in other gains/(losses).

### (iv) Impairment

From 1 January 2018, the Group recognises loss allowances for expected credit losses on financial assets measured at amortised cost, debt investments measured at fair value through OCI, and contract assets.

The Group measures loss allowances at an amount equal to lifetime expected credit losses, except for debt securities that are determined to have low credit risk at the reporting date and other debt securities and bank balances for which credit risk has not increased significantly since initial recognition, which are measured at 12-month expected credit losses.

Loss allowances for trade receivables and contract assets are always measured at an amount equal to lifetime expected credit losses.

Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of the assets. For debt securities at fair value through OCI, the loss allowance is charged to profit or loss and is recognised in OCI.

### *Debt securities*

Our investment in debt securities are subject to credit risk. The Group's investment policy limits investments to certain types of instruments, such as money market instruments and corporate debt securities, places restrictions on maturities and concentration by type and issuer and specifies the minimum credit ratings for all investments and the average credit quality of the portfolio. The debt securities have been determined to have a low credit risk at 1 January 2018 and 31 December 2018 and 12-month expected credit losses are not material.

### *Cash and cash equivalents*

While cash and cash equivalents are also subject to the impairment requirements of IFRS 9, no material impairment loss was identified.

### *Trade and other receivables*

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets.

### (v) Accounting policies applied until 31 December 2017

The Group has applied IFRS 9 retrospectively but has elected not to restate comparative information. As a result, the comparative information provided continues to be accounted for in accordance with the group's previous accounting policy.

### ***(m) Non-Derivative Financial Instruments (prior to the adoption of IFRS 9)***

Until 1 January 2018, the Group classified non-derivative financial assets into the following categories: financial assets at FVTPL (fair value through profit and loss), held-to-maturity financial assets, loans and receivables and available-for-sale financial assets. Non-derivative financial liabilities are classified into the following categories: financial liabilities at FVTPL and other financial liabilities.

## 1. ACCOUNTING POLICIES (CONTINUED)

### *Available-For-Sale Financial Assets*

The initial measurement of available-for-sale assets has not changed under IFRS 9. Until 1 January 2018, subsequent to initial recognition, they are measured at fair value and changes other than impairment losses, interest income and foreign currency differences on debt instruments are recognised in other comprehensive income and accumulated in the fair value reserve. When these assets are derecognised, the gain or loss accumulated in equity is reclassified to profit and loss.

### *Trade and Other Receivables*

Until 1 January 2018, trade and other receivables are recognised initially at fair value. Subsequent to initial recognition they are measured at amortised cost using the effective interest method, less any impairment losses.

### *Other Financial liabilities*

Until 1 January 2018, Other financial liabilities are recognised initially at fair value. Subsequent to initial recognition they are measured at amortised cost using the effective interest method.

### *Cash and Cash Equivalents*

Cash and cash equivalents comprise cash balances, short-term deposits and available-for-sale financial assets with maturities of three months. Debt securities with a maturity at acquisition of less than three months are categorized as cash equivalents.

### *Financial Assets Impairment*

Until 1 January 2018, a financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event had a negative effect on the estimated future cash flows of that asset that can be estimated reliably. If any such evidence exists, the amount of the impairment is determined as follows:

- *Available-For-Sale Financial Assets*

When a decline in fair value of an available-for-sale financial asset has been recognized in other comprehensive income and there is objective evidence that the asset is impaired, the cumulative loss that has been recognized in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment. The amount of the cumulative loss that is reclassified from equity to profit or loss is the difference between the acquisition cost (net of any principal repayment and amortisation) and current value, less any impairment loss on that financial asset previously recognized in the profit or loss. If in a subsequent period, the fair value of a debt instrument classified as available-for-sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in profit or loss, the impairment loss is reversed, with the amount of the reversal recognised in the profit or loss.

- *Financial Assets Measured At Amortised Cost (Including Receivables)*

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Interest on the impaired asset continues to be recognised through the unwinding of the discount. When a subsequent event causes the amount of impairment loss to decrease, the decrease in impairment loss is reversed through profit or loss.

## 1. ACCOUNTING POLICIES (CONTINUED)

### *(n) Fair value hierarchy*

The Group is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. The fair value hierarchy prioritizes valuation inputs based on the observable nature of those inputs. The hierarchy defines three levels of valuation inputs:

Level 1 — Quoted prices in active markets for identical assets or liabilities

Level 2 — Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly

Level 3 — Unobservable inputs that reflect the Group's own assumptions about the assumptions market participants would use in pricing the asset or liability

The carrying amounts of the Group's cash and cash equivalents, restricted cash, accounts receivable, accounts payable and accrued expenses approximate fair value because of the short-term nature of these instruments. The fair value of available-for-sale financial assets, which are measured at fair value on a recurring basis is detailed in Note 21.

### *(o) Revenue (after the adoption of IFRS 15, Revenue from Contracts with Customers ("IFRS 15"))*

On 1 January 2018, the Group adopted new guidance on revenue recognition included in IFRS 15. The accounting policy applicable from 1 January 2018 is described below and further details below. The comparative financial information for the year ended 31 December 2017 and as of 31 December 2017 has not been restated and is prepared in accordance with the accounting policies that are described further below.

The Group has one contract with a customer, which is the GSK Collaboration and License Agreement. The GSK Collaboration and License Agreement consists of multiple performance obligations, including the transition of the NY-ESO SPEAR T-cell program to GSK, the development of a second target, PRAME, and an exclusive license (the "NY-ESO License") to research, develop, and commercialize the Group's NY-ESO SPEAR T-cell therapy program.

In September 2017, GSK exercised its option to obtain the NY-ESO License and the first tranche (\$26.6 million or £20 million) of the option exercise payment became payable to the Group. In connection with the option exercise, in September 2017, the GSK Agreement was amended to, among other things, include a detailed transition plan identifying the steps needed to complete transition of the Investigational New Drug Application (IND) process with the Food and Drug Administration (FDA) for the NY-ESO SPEAR T-cell program to GSK. On 23 July 2018, the transition activities were substantially completed and the IND for the NY-ESO SPEAR T-cell program transferred to GSK.

GSK nominated a second target program for the PRAME target antigen, which was announced on 9 January 2017. We have since completed all work under this collaboration program. The program led to the development of a final lead candidate SPEAR T-cell directed to a specific peptide from the PRAME antigen. We and GSK agreed that the collaboration should not continue due to the peptide, to which the lead candidate was directed, not reaching GSK criteria.

The aggregate transaction price consists of an upfront payment of \$42,123,000 received in June 2014, development milestones achieved of \$66,404,000, an option exercise fee of \$39,785,000. There was no variable consideration at 31 December 2018.

The Group determines the variable consideration to be included in the transaction price by estimating the most-likely amount that will be received and then applies a constraint to reduce the consideration to the amount which is probable of being received. The determination of whether a milestone is probable includes consideration of the following factors:

## 1. ACCOUNTING POLICIES (CONTINUED)

- Whether achievement of a development milestone is highly susceptible to factors outside the entity's influence, such as milestones involving the judgment or actions of third parties, including regulatory bodies or the customer;
- Whether the uncertainty about the achievement of the milestone is not expected to be resolved for a long period of time;
- Whether the Group can reasonably predict that a milestone will be achieved based on previous experience; and
- The complexity and inherent uncertainty underlying the achievement of the milestone.

Under the terms of the GSK Collaboration and License Agreement, the Group may also be entitled to development milestones. The development and regulatory milestones are per product milestones and are dependent on achievement of certain obligations, the nature of the product being developed, stage of development of product, territory in which an obligation is achieved and type of indication or indications in relation to which the product is being developed. In addition, for any program, multiple products may be developed to address different HLA-types. These amounts have not been included within the transaction price as of 31 December 2018 because they are not considered probable.

The Group may also receive commercialization milestones upon the first commercial sale of a product based on the indication and the territory and mid-single to low double-digit royalties on worldwide net sales. These amounts have not been included within the transaction price as of 31 December 2018 because they are sales or usage-based royalties promised in exchange for a license of intellectual property, which will be recognized when the subsequent sale or usage occurs.

The payments to the Group under the contract are typically due upon achievement of milestones and within standard payment terms (approximating to 45 days). The contract does not include a significant financing component.

The upfront payment of \$42,123,000 was allocated between the performance obligations using the Group's best estimate of the relative selling price. In determining the best estimate, the Group considered internal pricing objectives it used in negotiating the contract, together with internal data regarding the cost and margin of providing services for each deliverable taking into account the different stage of development of each development program included in the contract. The variable consideration is allocated to the performance obligation to which it relates.

The amount of the transaction price allocated to the performance obligation is recognized as or when the Group satisfies the performance obligation. The Group satisfies the performance obligations relating to the transition of the NY-ESO SPEAR T-cell program and the development of a second target, PRAME, over time and recognizes revenue based on an estimate of the percentage of completion of the project determined based on the costs incurred on the project as a percentage of the total expected costs. The Group considers that this depicts the progress of the project, where the significant inputs are internal project resource and third-party clinical and manufacturing costs. The determination of the percentage of completion requires the Group to estimate the costs-to-complete the project. The Group makes a detailed estimate of the costs-to-complete on an annual basis as part of the Group's budgeting process, which is re-assessed every reporting period based on the latest project plan and discussions with project teams. If a change in facts or circumstances occurs, the estimate is adjusted, and the revenue is recognized based on the revised estimate. The difference between the cumulative revenue recognized based on the previous estimate and the revenue recognized based on the revised estimate is recognized as an adjustment to revenue in the period in which the change in estimate occurs.

The Group has determined that the performance obligation relating to the NY-ESO License is recognized at a point-in-time, upon commencement of the license, which occurred in September 2018.

The Group recognizes a contract asset, when the value of satisfied (or part satisfied) performance obligations is in excess of the payment due to the Group, and deferred revenue (contract liability) when the amount of unconditional

## 1. ACCOUNTING POLICIES (CONTINUED)

consideration is in excess of the value of satisfied (or part satisfied) performance obligations. Once a right to receive consideration is unconditional, that amount is presented as a receivable.

The timing and amount of milestone payments for the development and transition of the NY-ESO SPEAR T-cell program are intended to be commensurate with the cost and effort involved in achieving the milestones and therefore a contract asset would typically arise. The Group received \$26,610,000 of the option exercise fee in September 2017, which was included in deferred revenue at 1 January 2018 and this amount was recognized as revenue, along with a further option exercise fee of \$13,175,000, in September 2018 upon commencement of the license.

Changes in deferred revenue typically arise due to:

- adjustments arising from a change in the estimate of the cost to complete the project, which results in a cumulative catch-up adjustment to revenue that affects the corresponding contract asset or deferred revenue;
- a change in the estimate of the transaction price due to changes in the assessment of whether variable consideration is constrained because it is not considered probable of being received;
- the recognition of revenue arising from deferred revenue; and
- the reclassification of amounts to receivables when a right to consideration to becomes unconditional.

A change in the estimate of variable consideration constrained (for example, if a development milestone becomes probable of being received) could result in a significant change in the revenue recognized and deferred revenue.

Revenue is recognized when earned and realized or realizable, which is generally when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the seller's price to the buyer is fixed or determinable, and collectability is reasonably assured. Where applicable, all revenues are stated net of value added and similar taxes.

### ***(p) Revenue (prior to the adoption of IFRS 15)***

Revenue is recognized to the extent that the Group obtains the right to consideration in exchange for its performance and is measured at the fair value of the consideration received excluding Value-Added Tax (VAT). If a payment is for multiple deliverables, then an allocation of the fair value of each deliverable is assessed based on available evidence, judgment is required to attribute the fair value to the various elements.

Where a deliverable has only been partially completed at the balance sheet date, revenue is calculated by reference to the value of services performed as a proportion of the total services to be performed for each deliverable or on a straight-line basis if the pattern of performance cannot be estimated. The amount of revenue recognized is limited to non-refundable amounts already received or reasonably certain to be received. We consider payments reasonably certain to be received at the point that satisfactory criteria are agreed with GSK. Where payments are received from customers in advance of services provided, the amounts are recorded as deferred income and included within current liabilities or non-current liabilities, depending on when the services are expected to be delivered.

### ***(q) Operating Leases***

Costs in respect of operating leases are charged to the income statement on a straight line basis over the lease term. There are no assets currently held under finance leases.

## 1. ACCOUNTING POLICIES (CONTINUED)

### *(r) Research and Development Expenditure*

Research and development expenditure includes direct and indirect costs of these activities, including staff costs and materials, as well as external contracts. All such expenditure is expensed as incurred unless the capitalisation criteria of International Accounting Standard 38, 'Intangible Assets' have been satisfied.

### *(s) Pension Costs*

The Group operates a defined contribution pension scheme for its executive directors and employees. The contributions to this scheme are expensed to the Income Statement as they fall due.

### *(t) Government Grants*

Government grants are recognised as other income over the period necessary to match them with the related costs when there is reasonable assurance that the Group will comply with any conditions attached to the grant and the grant will be received.

### *(u) Share-Based Payments*

The Group operates equity-settled, share-based compensation plans. Certain employees of the Group are awarded options over the shares in the parent company. The fair value of the employee services received in exchange for these grants of options is recognised as an expense, using the Black-Scholes option-pricing model, with a corresponding increase in reserves. The total amount to be expensed over the vesting year is determined by reference to the fair value of the options granted and assumptions about the number of options that are expected to vest. The Group has analysed historic forfeiture rates for share options and determined approximately 3% of options granted are not expected to vest due to forfeitures.

### *(v) Taxation*

Tax on the profit or loss for the year comprises current and deferred tax. Tax is recognised in the income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable or receivable on the taxable income or loss for the current or prior years, using tax rates enacted or substantively enacted at the balance sheet date.

Current tax includes tax credits from the U.K and U.S. taxing authorities, including the U.K. research and development tax credit regime applicable to small and medium sized companies, the U.K. (the "U.K. SME Tax Credit"), the U.S. Research Tax Credit and the U.S. Orphan Drug Credit. The tax credits for each period are estimated based on calculations that conform to the applicable tax regulations. Receipts under the U.K. R&D expenditure credit ("RDEC") scheme, which may be reimbursed and are similar in nature to grant income, are presented within other income.

Deferred tax is provided on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the balance sheet date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised.

## 1. ACCOUNTING POLICIES (CONTINUED)

### (w) Dividends

Dividends received from subsidiary undertakings are accounted for when received. Dividends paid are accounted for in the period when they are paid.

### (x) Earnings per Share

Basic loss per share is determined by dividing net loss attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period. Diluted loss per share is determined by dividing net loss attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period, adjusted for the dilutive effect of all potential ordinary shares that were outstanding during the period. Potentially dilutive shares are excluded from the when the effect would be to increase diluted earnings per share or reduce diluted loss per share.

The following table reconciles the numerator and denominator in the basic and diluted loss per share computation (in thousands):

For the year ended 31 December	2018 \$'000	2017 \$'000
<b>Numerator for basic and diluted loss per share</b>		
Loss for period	<u>(91,555)</u>	<u>(71,308)</u>
<b>Loss attributable to shareholders used for basic and diluted EPS calculation</b>	<b><u>(91,555)</u></b>	<b><u>(71,308)</u></b>
<b>Denominator for basic and diluted loss per share</b>		
Weighted average number of shares used to calculate basic and diluted loss per share	<b>584,338,942</b>	527,637,086

The effects of the following potentially dilutive equity instruments have been excluded from the diluted loss per share calculation because they would have an antidilutive effect on the loss per share for the period:

As of	2018	2017
Weighted average number of share options <sup>(1)</sup>	<b>88,553,474</b>	70,374,832

### (y) Adopted IFRS Not Yet Applied

The following standards and interpretations have been issued but are not yet effective and therefore have not been applied in these financial statements.

#### IFRS 16, Leases (mandatory for year commencing on or after 1 January 2019) ("IFRS 16")

IFRS 16 specifies how an IFRS reporter will recognise, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. Lessors continue to classify leases as operating or finance, with IFRS 16's approach to lessor accounting substantially unchanged from the previous guidance.

The Group is currently evaluating the impact of adopting IFRS 16. However, the adoption of IFRS 16 is likely to have a material impact on the consolidated financial statements due to the following:

**1. ACCOUNTING POLICIES (CONTINUED)**

- It is anticipated that lease assets of approximately \$21 million and a corresponding lease liability of approximately \$26 million will be recorded upon adoption.
- Under current guidance, the costs in respect of operating leases are charged to the income statement on a straight line basis over the lease term. Under IFRS 16, the cost in respect of leases are the depreciation of the right-of-use asset and an imputed interest charge arising on the lease liability.

The Group plans to apply IFRS 16 initially on 1 January 2019, using the modified retrospective approach. Therefore, the cumulative effect of adopting IFRS 16 will be recognised as an adjustment to the opening balance of retained losses at 1 January 2019, with no restatement of comparative information.

There are no other standards that are not yet effective and that would be expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

**(z) IFRS adopted in the year ended 31 December 2018**

Impact of adopting IFRS 15

The core principle of IFRS 15 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve that core principle, an entity should apply the following steps:

Step 1: Identify the contract(s) with a customer.

Step 2: Identify the performance obligations in the contract.

Step 3: Determine the transaction price.

Step 4: Allocate the transaction price to the performance obligations in the contract.

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation.

The Group has adopted the guidance using the modified retrospective approach, with the cumulative effect of initially applying the guidance recognized as an adjustment to retained losses at 1 January 2018. Therefore, the comparative information has not been adjusted and continues to be reported under previous guidance.

The quantitative impacts of the changes on the consolidated income statement for the year ended 31 December 2018 are set out below:

	<u>Under previous revenue guidance</u>	<u>Adjustment</u>	<u>As reported</u>
	\$'000	\$'000	\$'000
Revenue	67,802	(8,297)	59,505
<b>Operating loss</b>	<b>(94,277)</b>	<b>(8,297)</b>	<b>(102,574)</b>
<b>Loss before income taxes</b>	<b>(99,420)</b>	<b>(8,297)</b>	<b>(107,717)</b>
<b>Loss for the period</b>	<b>(83,258)</b>	<b>(8,297)</b>	<b>(91,555)</b>
<b>Basic and diluted loss per share</b>	<b>(0.14)</b>		<b>(0.16)</b>

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## 1. ACCOUNTING POLICIES (CONTINUED)

The quantitative impacts of the changes on the consolidated balance sheet as of 31 December 2018 are set out below:

	<u>Under previous revenue guidance</u>	<u>Adjustment</u>	<u>As reported</u>
	\$'000	\$'000	\$'000
Accumulated Other comprehensive income	(16,686)	(348)	(17,034)
Retained losses	(244,070)	348	(243,722)
<b>Total Equity</b>	<b>253,099</b>	<b>—</b>	<b>253,099</b>

The quantitative impacts of the changes on the consolidated statement of cash flows for the year ended 31 December 2018 are set out below:

	<u>Under previous revenue guidance</u>	<u>Adjustment</u>	<u>As reported</u>
	\$'000	\$'000	\$'000
Loss for the period	(83,258)	(8,297)	(91,555)
(Decrease) increase in trade and other payables	(49,220)	8,297	(40,923)

The cumulative effect of adopting the guidance on the consolidated financial statements at 1 January 2018 is a credit to opening retained losses and corresponding decrease in deferred revenue of \$8,645,000.

The adoption of IFRS 15 has had a material impact on the consolidated financial statements due to the following:

- Under the GSK Collaboration and License Agreement, the Group will receive non-substantive milestone payments in the future upon achievement of specified development milestones. Non-substantive milestones are currently included within the transaction price upon achievement of the milestone and recognized over the period during which the Group is delivering services to GSK. IFRS 15 requires an entity to estimate the amount of consideration to which the entity will be entitled in exchange for transferring the promised goods or services to a customer. This includes an estimate of variable consideration to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. This results in certain milestone payments being recognized earlier under IFRS 15 than under existing guidance, if it is considered probable that the milestone will be achieved.
- Upfront payments and non-refundable milestone payments were previously recognized in revenue using the proportional performance model rateably over the period that services are rendered, unless another attribution method more closely approximates the delivery of the goods or services to the customer. IFRS 15 requires an entity to recognize revenue using a measure of progress that depicts the transfer of control of the goods or services to the customer. The Group considers that an input measure, such as costs incurred, relative to the total expected inputs is the appropriate measure to depict the transfer of control of the services under the GSK Collaboration and License Agreement, which impacts the timing of its revenue from the GSK Collaboration and License Agreement.

The Group has applied the practical expedient for contracts that were modified before the adoption of IFRS 15, which permits entities to not retrospectively restate the contract for those contract modifications. Instead, the aggregate effect of all modifications that occurred before the adoption date has been reflected when:

- a. Identifying the satisfied and unsatisfied performance obligations

## 1. ACCOUNTING POLICIES (CONTINUED)

b. Determining the transaction price

c. Allocating the transaction price to the satisfied and unsatisfied performance obligations.

IFRS 15 requires an entity to provide financial statement users with sufficient information to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. To help achieve this objective, IFRS 15 requires certain quantitative and qualitative disclosures included within Note 2, which are more extensive than the previously required revenue disclosures.

### *Impact of adopting IFRS 9*

IFRS 9 replaces the previous guidance relating to the recognition, classification and measurement of financial assets and financial liabilities, derecognition of financial instruments, impairment of financial assets and hedge accounting. The adoption of IFRS 9 from 1 January 2018 resulted in changes in accounting policies and adjustments to the amounts recognised in the financial statements. The new accounting policies are set out above. In accordance with the transitional provisions of IFRS 9, comparative figures have not been restated. The adoption of IFRS 9 had no impact on the opening retained losses of the Group.

#### *(i) Classification and measurement*

On 1 January 2018 (the date of initial application of IFRS 9), the Group's management has assessed which business models apply to the financial assets held by the Group and has classified its financial instruments into the appropriate IFRS 9 categories. This had no impact on the measurement of the financial assets.

#### *(ii) Impairment of financial assets*

The Group's financial assets are subject to IFRS 9's new expected credit loss model. This Group's financial assets are considered to be low risk because they are predominately high-grade investments, and therefore the impairment provision is determined as 12 months' expected credit losses. Applying the expected credit risk model did not result in the recognition of a loss allowance as of 1 January 2018 or during the year ended 31 December 2018.

## 2 REVENUE & SEGMENTAL REPORTING

### Group

Revenue from contracts with customers arises from one customer, which is GSK, in one geographic location, which is the United Kingdom.

Revenue comprises the following categories:

For the year ended 31 December	<u>2018</u>
	<u>\$'000</u>
Development	20,391
Licenses	39,114
	<u>59,505</u>

## 2 REVENUE & SEGMENTAL REPORTING (CONTINUED)

The deferred revenue balance as of 1 January 2018 and 31 December 2018 is as follows:

	<b>31 December 2018</b>	<b>1 January 2018</b>
	<b>\$'000</b>	<b>\$'000</b>
Deferred revenue	—	30,090

Deferred revenue has decreased from \$30,090,000 at 1 January 2018 to \$0 at 31 December 2018 primarily due to the recognition of license revenue of \$39,114,000 for the NY-ESO License which commenced in September 2018, of which \$27,001,000 was included in the opening balance of deferred revenue. A further \$3,089,000 of the deferred revenue at 1 January 2018 was recognized in the year ended 31 December 2018.

The impact of changes in variable consideration in the year ended 31 December 2018 was a reduction in deferred revenue of \$10,396,000, respectively, and the impact of changes in the percentage of completion in the year ended 31 December 2018 was to increase deferred revenue by \$5,027,000.

At 31 December 2018, there were no unsatisfied (or partially satisfied) performance obligations. The NY-ESO program transferred to GSK on 23 July 2018 which resulted in the revenue allocated to the NY-ESO License and the transition activities being recognized in year ended 31 December 2018. The revenue allocated to the PRAME pre-clinical development program was recognized over the development period, which was completed as at 31 December 2018.

### Geographic information

Noncurrent assets (excluding intangibles, financial instruments, and deferred tax) based on geographic location:

<b>As of 31 December</b>	<b>2018</b>	<b>2017</b>
	<b>\$'000</b>	<b>\$'000</b>
United Kingdom	<b>18,828</b>	22,786
United States	<b>17,290</b>	17,893
	<b><u>36,118</u></b>	<b><u>40,679</u></b>

Clinical materials of \$3,953,000 and \$4,695,000, included within non-current assets as of 31 December 2018 and 2017, respectively, are not included within the table above because they can easily be transferred between geographic location.

## 3 OTHER INCOME

### Group

<b>For the year ended 31 December</b>	<b>2018</b>	<b>2017</b>
	<b>\$'000</b>	<b>\$'000</b>
Income from government grants	—	150
U.K. research and development expenditure credit	<b>639</b>	981
Reimbursement of certain equity issuance costs	<b>810</b>	450
	<b><u>1,449</u></b>	<b><u>1,581</u></b>

#### 4 EXPENSES AND AUDITOR'S REMUNERATION

##### Group

For the year ended 31 December	2018 \$'000	2017 \$'000
<b>Operating loss is stated after charging/(crediting):</b>		
Operating lease charges:		
Other than Plant & Machinery	3,399	3,617
Realized foreign exchange losses	3,953	652
Depreciation of owned property, plant and equipment (note 9)	7,188	5,032
Amortisation of intangibles (note 10)	622	391
Loss on disposal of assets	7	194
Other expenses include amounts receivable by the Group's auditor and its associates in respect of:		
Audit of the annual financial statements	589	193
Audited-related fees	172	110
Tax fees	—	—
All other fees	10	6

#### 5 STAFF NUMBERS AND COSTS

##### Group

The average number of persons employed by the Group (including Directors) during the period, analysed by category, was as follows:

For the year ended 31 December	2018	2017
Research & Development	320	260
Management & Administration	89	70
	409	330

The aggregate staff costs of these persons were as follows:

For the year ended 31 December	2018 \$'000	2017 \$'000
Wages and salaries	42,709	33,830
Social security costs	3,774	2,907
Share based payment – fair value of employee services (note 23)	15,945	9,357
Pension costs – defined contribution (note 22)	1,848	1,264
	64,276	47,358

## 6 DIRECTORS' REMUNERATION

### Group

For the year ended 31 December	2018 \$'000	2017 \$'000
Directors' emoluments	983	975

Directors' emoluments include employer social security contributions of \$119,000 (2017: \$94,000).

Total Directors' pension contributions for the period were \$nil (2017: \$nil).

No retirement benefits are accruing to Directors (2017: none) under the Group's pension schemes. No Directors (2017: none) exercised share options in the parent company during the period.

For the year ended 31 December	2018 \$'000	2017 \$'000
<b>Highest paid Director</b>		
Aggregate emoluments and benefits	853	877

(Excluding gains on exercise of share options)

The highest paid Director's pension contributions for the year ended 31 December 2018 were \$nil (2017: \$nil). The highest paid Director exercised no share options in the period (2017: nil)

## 7 FINANCE INCOME AND EXPENSE

### Group

*Finance income recognised in the income statement:*

For the year ended 31 December	2018 \$'000	2017 \$'000
Net unrealized foreign exchange gains	—	5,043
Interest income on financial assets at fair value through OCI (2017: available-for-sale financial assets)	2,422	1,406
Interest income on cash, cash equivalents and short-term deposits	427	824
	2,849	7,273

*Finance expense recognised in the income statement:*

For the year ended 31 December	2018 \$'000	2017 \$'000
Net unrealized foreign exchange losses	7,748	—
Amortization and accretion of financial assets at fair value through OCI (2017: available-for-sale financial assets)	244	507
Other	—	22
	7,992	529

## 8 TAXATION CREDIT

### Group

*Recognised in the income statement:*

For the year ended 31 December	2018 \$'000	2017 \$'000
Current tax income:		
U.K. R&D tax credit	16,350	9,566
U.S. corporation tax	(497)	(452)
Adjustments in respect of prior periods	309	30
<b>Total tax credit recognized in income statement</b>	<b>16,162</b>	<b>9,144</b>

### Reconciliation of Effective Tax Rate

The total tax credit is lower (2017: lower) than the standard rate of corporation tax in the U.K. The differences are explained below:

For the year ended 31 December	2018 \$'000	2017 \$'000
Loss before tax	107,717	80,452
Tax at the U.K. corporation tax rate of 19% (2017: 19.5%)	20,465	15,485
Non-deductible expenses	1,029	631
Deferred taxes not recognised	(16,634)	(9,966)
Difference in tax rates	(1,252)	(1,071)
Additional allowance in respect of enhanced R&D relief	12,330	6,954
Surrender of tax losses for R&D tax credit refund	(5,156)	(3,011)
R&D tax credits generated	4,814	—
Other	566	123
	16,162	9,144

As of 31 December 2018, there are accumulated tax losses for carry forward in the U.K. of approximately \$175,600,000 (2017: \$129,500,000), expenditure credit carryforwards of \$600,000 and U.S. tax credit carryforwards of \$4,200,000 (2017: \$205,000). Unsurrendered U.K. tax losses and tax credit carryforwards can be carried forward indefinitely to be offset against future taxable profits, however this is restricted to an annual £5 million allowance in each standalone company or group and above this allowance, there will be a 50% restriction in the profits that can be covered by losses brought forward. U.S. tax credit carryforwards can be carried forward for 20 years.

No deferred tax asset is recognised in respect of accumulated tax losses on the basis that suitable future trading profits are not sufficiently certain.

The effective U.K. corporate tax rate for the years ended 31 December 2018 and 2017 was 19% and 19.25%, respectively. Reductions to the U.K. corporation tax rate to 18% (effective from 1 April 2020) was substantively enacted on 26 October 2015, and an additional reduction to 17% (effective from 1 April 2020) was substantively enacted on 6 September 2016.

The U.S. corporate tax rate for the years ended 31 December 2018 was 21%. This rate has decreased from 34% for the year ending 31 December 2017 due to U.S. tax reforms which were enacted in December 2017. We believe that other aspects of U.S. tax reforms will not have a significant impact on our income taxes.

## 9 PROPERTY, PLANT & EQUIPMENT

### Group

	<u>Computer Equipment</u> \$'000	<u>Office Equipment</u> \$'000	<u>Laboratory Equipment</u> \$'000	<u>Leasehold Improvements</u> \$'000	<u>Total</u> \$'000
<b>Cost</b>					
At 1 January 2017	1,904	265	11,423	18,830	32,422
Additions	702	558	6,118	9,265	16,643
Disposals	—	—	—	(1,373)	(1,373)
Effect of foreign currency translation	100	35	1,204	1,112	2,451
<b>At 31 December 2017</b>	<b>2,706</b>	<b>858</b>	<b>18,745</b>	<b>27,834</b>	<b>50,143</b>
Additions	313	21	3,571	5	3,910
Disposals	—	—	—	—	—
Effect of foreign currency translation	(103)	(32)	(1,036)	(840)	(2,011)
<b>At 31 December 2018</b>	<b>2,916</b>	<b>847</b>	<b>21,280</b>	<b>26,999</b>	<b>52,042</b>
<b>Depreciation</b>					
At 1 January 2017	<b>605</b>	<b>81</b>	<b>3,318</b>	<b>519</b>	<b>4,523</b>
Charge for period	643	78	2,752	1,559	5,032
Disposals	—	—	—	(629)	(629)
Effect of foreign currency translation	54	8	430	46	538
<b>At 31 December 2017</b>	<b>1,302</b>	<b>167</b>	<b>6,500</b>	<b>1,495</b>	<b>9,464</b>
Charge for period	783	172	3,940	2,293	7,188
Disposals	—	—	—	—	—
Effect of foreign currency translation	(67)	(13)	(533)	(115)	(728)
<b>At 31 December 2018</b>	<b>2,018</b>	<b>326</b>	<b>9,907</b>	<b>3,673</b>	<b>15,924</b>
<b>Carrying value</b>					
At 1 January 2017	1,299	184	8,105	18,311	27,899
At 31 December 2017	1,404	691	12,245	26,339	40,679
<b>At 31 December 2018</b>	<b>898</b>	<b>521</b>	<b>11,373</b>	<b>23,326</b>	<b>36,118</b>

## 10 INTANGIBLES

### Group

	<u>Licensed technology</u> \$'000	<u>In-process R&amp;D</u> \$'000	<u>Computer Software</u> \$'000	<u>Total</u> \$'000
<b>Cost</b>				
At 1 January 2017	183	4,625	1,310	6,118
Additions	—	939	369	1,308
Effect of foreign currency translation	17	503	110	630
At 31 December 2017	<u>200</u>	<u>6,067</u>	<u>1,789</u>	<u>8,056</u>
Additions	10	146	788	944
Effect of foreign currency translation	(13)	—	(83)	(96)
<b>At 31 December 2018</b>	<u><b>197</b></u>	<u><b>6,213</b></u>	<u><b>2,494</b></u>	<u><b>8,904</b></u>
<b>Amortization</b>				
At 1 January 2017	11	—	214	225
Charge for period	23	—	368	391
Effect of foreign currency translation	2	—	34	36
At 31 December 2017	<u>36</u>	<u>—</u>	<u>616</u>	<u>652</u>
Charge for period	25	—	597	622
Effect of foreign currency translation	(4)	—	(52)	(56)
<b>At 31 December 2018</b>	<u><b>57</b></u>	<u><b>—</b></u>	<u><b>1,161</b></u>	<u><b>1,218</b></u>
<b>Carrying value</b>				
At 1 January 2017	172	4,625	1,096	5,893
At 31 December 2017	<u>164</u>	<u>6,067</u>	<u>1,173</u>	<u>7,404</u>
<b>At 31 December 2018</b>	<u><b>140</b></u>	<u><b>6,213</b></u>	<u><b>1,333</b></u>	<u><b>7,686</b></u>

On 25 November 2015, the Group entered into a Research, Collaboration and License Agreement relating to gene editing and Human Leukocyte Antigen (“HLA”) engineering technology with Universal Cells, Inc. (“Universal Cells”). The Group paid an upfront license and start-up fee of \$2.5 million to Universal Cells in November 2015 and milestone payments of \$0.2 million, \$0.9 million and \$3.0 million in the years ended 31 December 2018, 2017 and 2016, respectively. Further milestone payments of up to \$43.5 million are payable if certain development and product milestones are achieved.

## 11 INVESTMENTS IN SUBSIDIARIES

### Company

	<u>\$'000</u>
<b>Cost and carrying value</b>	
At 1 January 2017	97,660
Capital contributions in respect of share-based payment transactions	<u>7,167</u>
<b>At 31 December 2017</b>	<b>104,827</b>
Capital contributions in respect of share-based payment transactions	<u>13,235</u>
<b>At 31 December 2018</b>	<b><u>118,062</u></b>

The Company has the following (direct or indirect) interest in subsidiary undertakings:

Name of Company	Country of	Holding	Proportion	Nature of Business
	Incorporation		Held	
Adaptimmune Limited	England and Wales	Ordinary shares of £0.001	100 %	Biotechnology Research & Development
Adaptimmune LLC	United States of America	Ordinary Shares of \$1	100 %	Biotechnology Research & Development

## 12 FINANCIAL ASSETS AT AMORTISED COST

### Company

<u>As of 31 December</u>	<u>2018</u>	<u>2017</u>
	<u>\$'000</u>	<u>\$'000</u>
Loan receivables from group undertakings	<b><u>219,056</u></b>	<u>269,619</u>

Loan receivables from group undertakings arise due to a five year U.S. dollar denominated unsecured loan, which accrues interest at a rate of 2.38% per annum.

## 13 RESTRICTED CASH

### Group

As of 31 December 2018 and 2017, the Group had restricted cash of \$4,097,000 and \$4,253,000, respectively, relating to security deposits for letters of credit relating to leased properties.

## 14 OTHER CURRENT ASSETS

### Group

<u>As of 31 December</u>	<u>2018</u>	<u>2017</u>
	<u>\$'000</u>	<u>\$'000</u>
Prepayments	6,279	6,120
Clinical materials	1,087	3,760
Other current assets	<u>1,944</u>	<u>9</u>
	<b><u>9,310</u></b>	<b><u>9,889</u></b>

## 15 TRADE & OTHER RECEIVABLES

### Group

As of 31 December	2018 \$'000	2017 \$'000
Trade receivables	192	206
Other receivables	—	373
	<b>192</b>	<b>579</b>

### Company

As of 31 December	2018 \$'000	2017 \$'000
Amounts owed from group undertakings	8,692	4,382
	<b>8,692</b>	<b>4,382</b>

Amounts owed from group undertakings are trading balances, which are unsecured and have no fixed date of repayment.

## 16 FINANCIAL ASSETS AT FAIR VALUE THROUGH OCI (2017: AVAILABLE-FOR-SALE FINANCIAL ASSETS)

### Group

As of 31 December	2018 \$'000	2017 \$'000
Marketable securities denominated in U.S. dollars	136,755	—
	<b>136,755</b>	<b>—</b>

## 17 CASH AND CASH EQUIVALENTS

### Group

As of 31 December	2018 \$'000	2017 \$'000
Cash and cash equivalents held in pounds sterling	27,914	42,166
Cash and cash equivalents held in U.S. dollars	40,465	41,877
	<b>68,379</b>	<b>84,043</b>

The Group's policy for determining cash and cash equivalents is to include all cash balances, short-term deposits and investments with original maturities of three months or less.

When the Group assesses its liquidity position it includes cash and cash equivalents as well as short-term investments.

## 18 CAPITAL AND RESERVES

### Group and Company

#### Share capital

As of 31 December	2018 \$'000	2017 \$'000
<i>Allotted, called up and fully paid 627,454,270 (As of 31 December 2017: 562,119,334) Ordinary shares of 0.1p each</i>	<u>939</u>	<u>854</u>

#### Ordinary shares

Each holder of ordinary shares is entitled to one vote, on a show of hands and one vote per share on a poll, at general meetings of the Company. On the winding up of the Company, the assets of the Company available for distribution to holders remaining after payment of all other debts and liabilities of the Company shall be paid to the shareholders in proportion to the number of shares held by each of them. The payment of dividends by Adaptimmune Therapeutics plc is governed by U.K. law.

Effective from 21 June 2017, the Directors have the authority to allot new ordinary shares or to grant rights to subscribe for or to convert any security into ordinary shares in the Company up to a maximum aggregate nominal amount of £140,000. This authority runs for five years and will expire on 20 June 2022. Effective from 21 June 2017, the Directors also have the authority to allot ordinary shares for cash or to grant rights to subscribe for or to convert any security into ordinary shares in the Company without first offering them to existing shareholders in proportion to their existing holdings up to an aggregate maximum nominal amount of £140,000. This power will expire at the end of the Annual General Meeting of the Company to be held in 2019.

#### 2018 Registered direct offering

On 7 September 2018, the Company completed a registered direct offering of its American Depositary Shares (“ADSs”) following its entry into a definitive agreement with Matrix Capital Management Company, LP, New Enterprise Associates 16, L.P., New Enterprise Associates 14, L.P. and Syncona Portfolio Limited. The Company sold 10,000,000 ADSs (representing 60,000,000 ordinary shares) at a price of \$10.00 per ADS. The net proceeds were \$99,653,000 after deducting offering expenses of \$347,000.

#### 2017 Underwritten public offering

On 27 March 2017, the Company completed an underwritten public offering of the Company’s American Depositary Shares (“ADSs”). The Company sold 15,700,223 ADSs (representing 94,201,338 ordinary shares) at a price to the public of \$4.20 per ADS. The net proceeds were \$61,397,000 after deducting offering expenses of \$4,544,000.

#### 2017 Registered direct offering

On 10 April 2017, the Company completed a registered direct offering of the Company’s ADSs following its entry into a definitive agreement with Matrix Capital Management Company, LP. The Company sold 7,000,000 ADSs (representing to 42,000,000 ordinary shares) at a price of \$6.00 per ADS. The net proceeds were \$41,770,000 after deducting offering expenses of \$230,000.

#### Dividends

No dividends were paid or declared in the years ended 31 December 2018 and 2017.

## 18 CAPITAL AND RESERVES (CONTINUED)

### *Capital Management Policy*

The Group manages the operating cash outflow through its budgeting process and looks to raise sufficient funds from revenue and equity to cover these outflows.

### **Nature and purpose of reserves**

#### *Exchange reserve*

The exchange reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

#### *Fair value reserve*

The fair value reserve comprises the cumulative net change in the fair value of financial assets at fair value through OCI (2017: available-for-sale financial assets) until the assets are derecognized or impaired.

#### *Other reserve*

The other reserve has arisen as a result of the company reorganization described above.

## 19 NON-CURRENT TRADE AND OTHER PAYABLES

### **Group**

<b>As of 31 December</b>	<b>31 December 2018 \$'000</b>	<b>31 December 2017 \$'000</b>
Accruals	<u>5,414</u>	<u>3,849</u>
	<u>5,414</u>	<u>3,849</u>

## 20 CURRENT TRADE AND OTHER PAYABLES

### **Group**

<b>As of 31 December</b>	<b>2018 \$'000</b>	<b>2017 \$'000</b>
Trade payables	4,398	8,378
Other taxation and social security	509	6,204
Deferred income	—	38,735
Accruals	<u>19,529</u>	<u>20,997</u>
	<u>24,436</u>	<u>74,314</u>

**20 CURRENT TRADE AND OTHER PAYABLES (CONTINUED)**

**Company**

<u>As of 31 December</u>	<u>2018</u>	<u>2017</u>
	<u>\$'000</u>	<u>\$'000</u>
Trade payables	33	42
Amounts owed to group undertakings	1,247	—
Accruals	680	524
	<u>1,960</u>	<u>566</u>

Amounts owed to group undertakings are unsecured, have no fixed date of repayment, and are interest free.

## 21 FINANCIAL INSTRUMENTS

### Group

#### Disclosure of financial assets measured at fair value on a recurring basis

Assets and liabilities measured at fair value on a recurring basis based on Level 1, Level 2, and Level 3 fair value measurement criteria as of 31 December 2018 are as follows:

	31 December 2018 \$'000	Fair Value Measurements Using		
		Level 1 \$'000	Level 2 \$'000	Level 3 \$'000
<b>Assets:</b>				
Financial assets at fair value through OCI (2017: available-for-sale financial assets): Corporate debt securities	136,755	125,813	10,942	—

The Group estimates the fair value of financial assets at fair value through OCI (2017: available-for-sale financial assets) with the aid of a third party valuation service, which uses actual trade and indicative prices sourced from third-party providers on a daily basis to estimate the fair value. If observed market prices are not available (for example securities with short maturities and infrequent secondary market trades), the securities are priced using a valuation model maximizing observable inputs, including market interest rates.

## 21 FINANCIAL INSTRUMENTS (CONTINUED)

### *Disclosure of fair values of financial assets and liabilities:*

As of	31 December 2018		31 December 2017	
	Carrying amount \$'000	Fair value \$'000	Carrying amount \$'000	Fair value \$'000
<b>Financial assets not measured at fair value:</b>				
<b>Receivables</b>				
Trade receivables	192	192	206	206
Tax receivable	16,459	16,459	11,454	11,454
Other receivables	—	—	373	373
	<u>16,651</u>	<u>16,651</u>	<u>12,033</u>	<u>12,033</u>
Cash and cash equivalents	68,379	68,379	84,043	84,043

As of	31 December 2018		31 December 2017	
	Carrying amount \$'000	Fair value \$'000	Carrying amount \$'000	Fair value \$'000
<b>Financial liabilities not measured at fair value:</b>				
Trade payables	4,398	4,398	8,378	8,378
Other taxation and social security	509	509	6,204	6,204
Accruals	19,529	19,529	24,846	24,846
Tax payable	—	—	—	—
	<u>24,436</u>	<u>24,436</u>	<u>39,428</u>	<u>39,428</u>

For cash and cash equivalents, trade and other payables and trade and other receivables with a remaining life of less than one year, the nominal amount is deemed to reflect fair value.

### *Liquidity Risk*

The Group's treasury policy gives guidance on how much investment should be held with differing counterparties. The cash utilisation is monitored to provide a lead time for raising further funding.

The following are the contractual maturities of financial liabilities, including estimated interest payments and excluding the effect of netting agreements:

As of	31 December 2018		
	Carrying amount \$'000	Contractual cash flows \$'000	1 year or less \$'000
<b>Financial liabilities at amortised cost</b>			
Trade payables	4,398	4,398	4,398
Other taxation and social security	509	509	509
Accruals	19,529	19,529	19,529
	<u>24,436</u>	<u>24,436</u>	<u>24,436</u>

**21 FINANCIAL INSTRUMENTS (CONTINUED)**

<b>As of</b>	31 December 2017		
	Carrying amount \$'000	Contractual cash flows \$'000	1 year or less \$'000
<b>Financial liabilities at amortised cost</b>			
Trade payables	8,378	8,378	8,378
Other taxation and social security	6,204	6,204	6,204
Accruals	24,846	24,846	20,997
	<u>39,428</u>	<u>39,428</u>	<u>35,579</u>

**Foreign Exchange Risk**

Our surplus cash and cash equivalents are invested in interest-bearing savings, money market funds, corporate debt securities and commercial paper from time to time. Our investments in corporate debt securities are subject to fixed interest rates. Our exposure to interest rate sensitivity is impacted by changes in the underlying U.K. and U.S. bank interest rates and the fair market value of our corporate debt securities will fall in value if market interest rates increase. We do not believe an immediate one percentage point change in interest rates would have a material effect on the fair market value of our portfolio, and therefore we do not expect our operating results or cash flows to be significantly affected by changes in market interest rates.

Financial assets and liabilities in foreign currencies are as follows:

<b>As of 31 December</b>	2018	2017
	Carrying amount \$'000	Carrying amount \$'000
<b>Financial assets:</b>		
Cash and cash equivalents	27,914	42,116
<b>Financial liabilities:</b>		
Accruals	4,736	4,726
Trade payables	681	6,422

A 1% increase in exchange rates would reduce the carrying value of net financial assets and liabilities in foreign currencies at 31 December 2018 by \$225,000 (2017: \$1,499,000).

The results of operations and cash flows will be subject to fluctuations due to changes in foreign currency exchange rates, which could harm our business in the future. We seek to minimize this exposure by maintaining currency cash balances at levels appropriate to meet foreseeable expenses in U.S. dollars and pounds sterling. To date, we have not used forward exchange contracts or other currency hedging products to manage our exchange rate exposure, although we may do so in the future. The exchange rate as of 31 December 2018, the last business day of the reporting period, was £1.00 to \$1.27.

**Credit risk**

Trade receivables were \$192,000 and \$579,000 as of 31 December 2018 and 2017, respectively. Trade receivables arise in relation to the GSK Collaboration and License Agreement. We have been transacting with GSK since 2014, during which time no impairment losses have been recognized. There was \$192,000 past due as of 31 December 2018.

Our cash and cash equivalents are held with multiple banks and we monitor the credit rating of those banks. Our investments in corporate debt securities and commercial paper are subject to credit risk. Our investment policy limits investments to certain types of instruments, such as money market instruments, corporate debt securities and commercial paper, places restrictions on maturities and concentration by type and issuer and specifies the minimum credit ratings for all investments and the average credit quality of the portfolio.

## 21 FINANCIAL INSTRUMENTS (CONTINUED)

### *Market Risk*

Market risk is the risk that changes in market prices, such as in interest rates, commodity prices and foreign exchange rates will affect the Group's income or the value of its holdings of financial instruments. The Group's surplus cash and cash equivalents are invested in interest-bearing savings, money market funds, corporate debt securities and commercial paper from time to time. The Group's investments in corporate debt securities are subject to fixed interest rates. The Group's exposure to interest rate sensitivity is impacted by changes in the underlying U.K. and U.S. bank interest rates and the fair market value of our corporate debt securities will fall in value if market interest rates increase. We do not believe an immediate one percentage point change in interest rates would have a material effect on the fair market value of our portfolio, and therefore we do not expect our operating results or cash flows to be significantly affected by changes in market interest rates.

Financial assets and liabilities subject to variable interest rates are as follows:

As of 31 December	2018 Carrying amount \$'000	2017 Carrying amount \$'000
Cash and cash equivalents	<u>68,379</u>	<u>84,043</u>

An increase in Bank of England base rates by 0.5 percentage points would increase the net annual interest income applicable to the cash and cash equivalents as of 31 December 2018 by \$341,000 (31 December 2017: \$420,000).

The Group is exposed to commodity price risk as a result of its operations. However, given the size of the Group's operations, the costs of managing exposure to commodity price risk exceed any potential benefits. The Directors will revisit the appropriateness of this policy should the Group's operations change in size or nature. The Group has no exposure to equity securities price risk as it holds no listed or other equity investments.

## 22 EMPLOYEE BENEFITS

### **Group**

The Group operates a defined contribution pension scheme for its executive directors and employees. The assets of the scheme are held separately from those of the company in an independently administered fund. The unpaid contributions outstanding as of 31 December 2018 were \$134,000 (2017: \$280,000). The pension cost charge for the year ended 31 December 2018 was \$1,847,000 (2017: \$1,264,000).

## 23 SHARE BASED PAYMENTS

### Group

The Company grants options over ordinary shares in Adaptimmune Therapeutics plc under the following option plans: (i) the Adaptimmune Therapeutics plc 2015 Share Option Scheme (adopted on 16 March 2015); (ii) the Adaptimmune Therapeutics plc Company Share Option Plan (adopted on 16 March 2015) and (iii) the Adaptimmune Therapeutics plc Employee Share Option Scheme (adopted on 14 January 2016).

The Adaptimmune Therapeutics plc Company Share Option Plan is a tax efficient option scheme intended to comply with the requirements of Schedule 4 to the Income Tax (Earnings and Pensions) Act 2003 of the United Kingdom, which provides for the grant of company share option plan (“CSOP”) options. Grants may not exceed the maximum value of £30,000 per participant for the shares under the option, which is a CSOP compliance requirement.

Generally, the vesting dates for the options granted under these plans up to 31 December 2018 are 25% on the first anniversary of the grant date and 75% in monthly instalments over the following three years. However, the options granted to non-executive directors under the Adaptimmune Therapeutics plc 2015 Share Option Scheme vest and become exercisable as follows:

Options granted to non-executive directors on 11 May 2015:	Immediately on grant date
Options granted to a non-executive director on 23 June 2016:	25% on the first anniversary of the grant date and 75% in monthly instalments over the following two years
Options granted to non-executive directors on 11 August 2016:	100% on the first anniversary of the grant date
Options granted to non-executive directors on 28 November 2016:	25% on the first anniversary of the grant date and 75% in monthly instalments over the following two years
Options granted to non-executive directors on 3 July 2017:	100% on the first anniversary of the grant date
Options granted to non-executive directors on 22 June 2018:	100% on the first anniversary of the grant date
Options granted to a non-executive director on 5 July 2018:	25% on the first anniversary of the grant date and 75% in monthly instalments over the following two years

Options granted under these plans are not subject to performance conditions. The contractual term of options granted under these plans is ten years.

The maximum aggregate number of options which may be granted under these plans and any incentive plans adopted by the Company cannot exceed a scheme limit that equates to 8% of the initial fully diluted share capital of the Company immediately following our IPO plus an automatic annual increase of an amount equivalent to 4% of the issued share capital on each 30 June (or such lower number as the Board, or an appropriate committee of the Board, may determine). The automatic increase is effective from 1 July 2016.

### 23 SHARE BASED PAYMENTS (CONTINUED)

Prior to 31 December 2014, the Group granted options to purchase ordinary shares in Adaptimmune Limited under three option schemes:

- (i) The Adaptimmune Limited Share Option Scheme was adopted on 30 May 2008. Under this scheme Enterprise Management Incentive (“EMI”) options (which are potentially tax-advantaged in the United Kingdom) have been granted (subject to the relevant conditions being met) to our employees who are eligible to receive EMI options under applicable U.K. tax law and unapproved options (which do not attract tax advantages) have been granted to our employees who are not eligible to receive EMI options, and to our directors and consultants. In May 2014, the Company no longer qualified for EMI status and since that date, no further EMI options were granted under this scheme; however, unapproved options have been under granted under this scheme since that date.
- (ii) The Adaptimmune Limited 2014 Share Option Scheme was adopted on 11 April 2014. EMI options were granted (subject to the relevant conditions being met) under this scheme to our employees who are eligible to receive EMI options under applicable U.K. tax law. Unapproved options were granted to our employees who are not eligible to receive EMI options and to directors. In May 2014, the Company no longer qualified for EMI status and since that date, no further EMI options were granted under this scheme; however, unapproved options have been under granted under this scheme since that date.
- (iii) The Adaptimmune Limited Company Share Option Plan was adopted on 16 December 2014. This scheme allowed the grant of options to our eligible employees prior to the corporate reorganization. This scheme is a tax efficient option scheme and options were granted on 19 December 2014 and on 31 December 2014 to our part-time and full-time employees.

As part of the corporate reorganization in connection with our IPO, the holders of options granted under these schemes over ordinary shares of Adaptimmune Limited were granted equivalent options on substantially the same terms over ordinary shares of Adaptimmune Therapeutics plc (“Replacement Options”) in exchange for the release of these options. The Company does not intend to grant any further options under these schemes.

Generally, the vesting dates for the Replacement Options under the Adaptimmune Limited schemes are:

Options granted in 2009:	100% on the third anniversary of the grant date
Options granted in 2011, 2012, 2013 and April 2014:	25% on the first anniversary of the grant date and 75% in annual instalments over the following three years
Options granted in December 2014:	25% on the first anniversary of the grant date and 75% in monthly instalments over the following three years

The contractual life of options granted under these schemes is ten years.

### 23 SHARE BASED PAYMENTS (CONTINUED)

The number and weighted average exercise prices of share options (including grant in the year) are as follows:

	2018		2017	
	Number	Weighted average exercise price	Number	Weighted average exercise price
<b>For the year ended</b>				
Outstanding at start of year	74,943,667	£ 0.58	49,237,290	£ 0.58
Changes during the period:				
Granted	20,771,970	£ 0.63	29,924,787	£ 0.62
Forfeited	(5,334,936)	£ 0.42	(1,142,904)	£ 0.19
Exercised	(2,815,982)	£ 0.80	(3,075,506)	£ 1.04
Outstanding at the end of the period	87,564,719	£ 0.60	74,943,667	£ 0.58
Exercisable at the end of the period	47,678,481	£ 0.55	31,449,602	£ 0.51

There were 20,771,970 and 29,924,787 options granted in the years ended 31 December 2018 and 2017, respectively, of which 8,603,676 had a nominal exercise price (similar to a restricted stock unit (RSU)). The weighted average fair value of stock options with an exercise price equating to the fair market value on the date of grant granted in the years ended 31 December 2018 and 2017 were \$0.87 and \$0.74, respectively. The weighted average fair value of RSU-style stock options granted in the year ended 31 December 2018 was \$1.37.

There were 5,334,936 and 1,142,904 share options exercised in the years ended 31 December 2018 and 2017, respectively. In the years ended 31 December 2018 and 2017 the total intrinsic value of stock options exercised was \$7,258,000 and \$1,522,000, respectively and the cash received from exercise of stock options was \$3,037,000 and \$401,000, respectively. The Company satisfies the exercise of stock options through newly issued shares.

For options outstanding at 31 December 2018, the range of exercise prices and weighted average remaining contractual life are as follows:

Exercise Price	Outstanding		Exercisable	
	Total Share Options	Weighted-Average Remaining Contractual Life	Total Share Options	Weighted-Average Exercise Price
£0	8,099,412	9.2	—	£ —
£0 – £0.25	7,268,412	4.9	7,268,412	£ 0.12
£0.26 – £0.50	16,714,988	6.1	16,156,497	£ 0.42
£0.51 – £0.75	28,617,051	8.2	13,465,614	£ 0.61
£0.76 – £1.00	22,317,845	8.0	9,323,729	£ 0.90
£1.01 – £1.50	2,751,818	8.5	934,295	£ 1.04
£1.51 – £2.00	1,795,243	8.6	529,934	£ 1.82
<b>Total</b>	<b>87,564,769</b>	<b>7.6</b>	<b>47,678,481</b>	<b>£ 0.55</b>

The total charge for the year relating to share based payment plans was \$15,945,000 (2017: \$9,357,000), all of which related to equity-settled share based payment transactions.

### 23 SHARE BASED PAYMENTS (CONTINUED)

Options were valued using the Black-Scholes option-pricing model. No performance conditions were included in the fair value calculations. The assumptions used in the fair value calculation for options granted in the year are as follows:

For the year ended	2018	2017
Expected volatility	5 years	5 years
Expected life (years)	66 - 69% %	66-71 %
Risk free rate	0.90 - 1.15% %	0.40-0.76 %
Expected dividend yield	0% %	0 %

The expected term of the option is based on management judgment. Due to the Company's lack of sufficient history as a publicly traded company, management's estimate of expected volatility for grants prior to May 2017 are based on the average volatilities of seven public companies with similar attributes to the Company. For grants subsequent to May 2017, there is over two years of historical data upon which to determine the volatility of the Company's share price, which management consider is sufficient to estimate the volatility based on the Company's historical share price. The risk free rate is based on the Bank of England's estimates of gilt yield curve as of the respective grant dates.

The Group has analysed historic forfeiture rates for share options and determined approximately 2% of options granted are expected to be forfeited.

### 24 CAPITAL COMMITMENTS AND CONTINGENCIES

#### Group

As of 31 December	2018	2017
	\$'000	\$'000
Future capital expenditure contracted but not provided for	<u>963</u>	<u>945</u>

#### *Other commitments*

##### *Commitments for clinical materials, clinical trials and contract manufacturing*

As of 31 December 2018, the Group had non-cancellable commitments for purchase of clinical materials, contract manufacturing and committed funding under the MD Anderson strategic alliance of up to \$25,849,000, of which the Group expects to pay \$13,213,000 within one year and \$12,636,000 in one to three years. The amount and timing of these payments vary depending on the rate of progress of development. Future clinical trial expenses have not been included within the purchase commitments because they are contingent on enrolment in clinical trials and the activities required to be performed by the clinical sites. The Group's subcontracted costs for clinical trials and contract manufacturing were \$41,580,000 and \$41,505,000 for the years ended 31 December 2018 and 2017, respectively.

## 24 CAPITAL COMMITMENTS AND CONTINGENCIES (CONTINUED)

### *Bellicum Pharmaceuticals Inc., Co-Development and Co-Commercialization Agreement*

On 16 December 2016, the Group entered into a Co-Development and Co-Commercialization Agreement with Bellicum Pharmaceuticals, Inc. (“Bellicum”) in order to facilitate a staged collaboration to evaluate, develop and commercialize next generation T-cell therapies.

Under the agreement, the Group will evaluate Bellicum’s GoTCR technology (inducible MyD88/CD40 co-stimulation, or iMC) with the Group’s SPEAR T-cells for the potential to create enhanced T-cell therapeutics. Depending on results of the initial preclinical proof-of-concept phase, the agreement may progress to a two-target co-development and co-commercialization phase. To the extent necessary, and in furtherance of the parties’ proof-of-concept and co-development efforts, the parties granted each other a royalty-free, non-transferable, non-exclusive license covering their respective technologies for purposes of facilitating such proof-of-concept and co-development efforts. In addition, as to covered therapies developed under the agreement, the parties granted each other a reciprocal exclusive license for the commercialization of such therapies. During the proof of concept phase, each party bears its own costs and there are no payments made between the Group and Bellicum. Any research and development costs incurred by the Group with third parties have been accounted for in accordance with the Group’s accounting policy for research and development expenses.

With respect to any joint commercialization of a covered therapy, the parties agreed to negotiate in good faith the commercially reasonable terms of a co-commercialization agreement. The parties also agreed that any such agreement shall provide for, among other things, equal sharing of the costs of any such joint commercialization and the calculation of profit shares as set forth in the agreement.

The agreement will expire on a country-by-country basis once the parties cease commercialization of the T-cell therapies covered by the agreement, unless earlier terminated by either party for material breach, non-performance or cessation of development, bankruptcy/insolvency, or failure to progress to co-development phase.

### *MD Anderson Strategic Alliance*

On 26 September 2016, the Group announced that it had entered into a multi-year strategic alliance with The University of Texas MD Anderson Cancer Center (“MD Anderson”) designed to expedite the development of T-cell therapies for multiple types of cancer. The Group and MD Anderson are collaborating on a number of studies including clinical and preclinical development of the Group’s SPEAR T-cell therapies targeting NY-ESO, MAGE-A10 and MAGE-A4 and will collaborate on future clinical stage first and second generation SPEAR T-cell therapies across a number of cancers.

Under the terms of the agreement, the Group has committed at least \$19,644,000 to fund studies. Payment of this funding is contingent on mutual agreement to study orders in order for any study to be included under the alliance and the performance of set milestones by MD Anderson. The Group made an upfront payment of \$3,412,000 to MD Anderson in the year ended 31 December 2017 and milestone payments of \$2,325,000 in the year ended 31 December 2018. The Group is obligated to make further payments to MD Anderson as certain milestones are achieved. These costs are expensed to research and development as MD Anderson renders the services under the strategic alliance.

The agreement may be terminated by either party for material breach by the other party. Individual studies may be terminated for, amongst other things, material breach, health and safety concerns or where the institutional review board, the review board at the clinical site with oversight of the clinical study, requests termination of any study. Where any legal or regulatory authorization is finally withdrawn or terminated, the relevant study will also terminate automatically.

**24 CAPITAL COMMITMENTS AND CONTINGENCIES (CONTINUED)**

*Universal Cells Research, Collaboration and License Agreement*

On 25 November 2015, the Group entered into a Research, Collaboration and License Agreement relating to gene editing and Human Leukocyte Antigen (“HLA”) engineering technology with Universal Cells, Inc. (“Universal Cells”). The Group paid an upfront license and start-up fee of \$2.5 million to Universal Cells in November 2015, a milestone payment of \$3.0 million in February 2016 and further milestone payments of \$0.2 million and \$0.9 million in the year ended 31 December 2018 and 2017, respectively. Further milestone payments of up to \$43.5 million are payable if certain development and product milestones are achieved. Universal Cells would also receive a profit-share payment for the first product, and royalties on sales of other products utilizing its technology. The upfront license and start-up fee and milestone payments were expensed to research and development when incurred.

*ThermoFisher License Agreement*

In 2012, the Group entered into a series of license and sub-license agreements with Life Technologies Corporation, part of ThermoFisher Scientific, Inc. (“ThermoFisher”) that provide the Group with a field-based exclusive license under certain intellectual property rights owned or controlled by ThermoFisher. The Group paid upfront license fees of \$1.0 million relating to the license and sublicense agreements and has an obligation to pay minimum annual royalties (in the tens of thousands of U.S. dollars prior to licensed product approval and thereafter at a level of 50% of running royalties in the previous year), milestone payments and a low single-digit running royalty payable on the net selling price of each licensed product. The upfront payment made in 2012 was expensed to research and development when incurred. Subsequent milestone payments have been recognized as an intangible asset due to the technology having alternative future use in research and development projects at the time of the payment. The minimum annual royalties have been expensed as incurred.

On 16 June 2016, the Group entered into a supply agreement with ThermoFisher for the supply of the Dynabeads® CD3/CD28 technology. The Dynabeads® CD3/CD28 technology is designed to isolate, activate and expand human T-cells, and is being used in the manufacturing of the Group’s affinity enhanced T-cell therapies. The supply agreement runs until 31 December 2025. Under the supply agreement the Group is required to purchase its requirements for CD3/CD28 magnetic bead product exclusively from ThermoFisher for a period of 5 years and there are also minimum purchasing obligations, which are included within ‘Purchase commitments for clinical materials, clinical trials and contract manufacturing’ set forth above. ThermoFisher has the right to terminate the supply agreement for material breach or insolvency.

***Commitments under non-cancellable operating leases***

The total of future minimum lease payments payable under the entity’s non-cancellable operating leases for each of the following periods is as follows:

<b>As of 31 December</b>	<b>2018</b>		<b>2017</b>	
	<b>Land and buildings</b>	<b>Other</b>	<b>Land and buildings</b>	<b>Other</b>
	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>
Within one year	<b>3,682</b>	—	2,886	—
Within two to five years	<b>14,504</b>	—	15,326	—
Over five years	<b>13,772</b>	—	15,215	—
	<b>31,958</b>	—	<b>33,427</b>	—

The annual charge in the income statement for operating leases was \$3,399,000 for the year ended 31 December 2018 (2017: \$3,617,000). The leases refer to laboratory and office property in Oxfordshire, U.K. and Philadelphia, U.S.

## 25 RELATED PARTIES

### Group

#### *Immunocore Limited (“Immunocore”)*

The Group has historically entered into several agreements with Immunocore Limited (“Immunocore”). As of the closing of the Company’s registered direct offering of its American Depositary Shares on 10 April 2017, Immunocore held less than 5% of the Company’s shares. Due to several factors including the decrease in share ownership, the termination of the target collaboration agreement and our lack of common directors, the Company no longer considers Immunocore to be a related party with effect from 1 January 2018.

During the year ended 31 December 2017, Immunocore invoiced the Group in respect of: (i) services provided under a target collaboration agreement (which terminated on 1 March 2017); (ii) costs relating to prosecution of jointly owned patents; and (iii) property rents (effective until 1 June 2017).

During the year ended 31 December 2017, all of the Group’s U.K-based research and development and corporate staff moved into the Group’s new building at Milton Park, Oxfordshire, which comprises laboratory and office space. Consequently, the Group’s lease from Immunocore of premises formerly used for research and development terminated on 1 June 2017 and the Group received \$550,000 in relation to leasehold improvements, as provided for under the lease. The lease of the Group’s former corporate office premises was assigned to Immunocore effective from 1 July 2017 in a transaction on arms-length terms.

During the year ended 31 December 2017, the Group entered into transactions, in the ordinary course of business, with other related parties. Transactions entered into and trading balances outstanding as of 31 December 2017 are as follows:

<i>Related Party</i>	Invoiced to related party*	Purchases from related party	Amounts owed from related party	Amounts owed to related party
	\$’000	\$’000	\$’000	\$’000
Immunocore Limited	555	785	—	—

#### *Remuneration of Key Management Personnel*

The remuneration of the Directors and Executive Officers (excluding non-executive directors), who are the key management personnel of the Group, is set out below in aggregate for each of the categories specified in IAS 24, ‘Related Party Disclosures’.

<b>For the year ended 31 December</b>	<b>2018</b>	2017
	<b>\$’000</b>	\$’000
Short-term employee benefits	<b>4,150</b>	3,332
Share-based payments	<b>5,673</b>	5,235
	<b><u>9,823</u></b>	<u>8,567</u>

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