

**Polarean Imaging Plc**Group Annual Report & Accounts 2017

Company Number 10442853

## **Group Annual Report and Financial Statements**

for the year ended 31 December 2017

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## **Company Information**

#### **Directors & Advisers**

**Directors** Richard Morgan Non-Executive Chairman

Richard Hullihen

Kenneth West

Bastiaan Driehuys

Jonathan Allis

Juergen Laucht

Robert Bertoldi

Chief Executive Officer

Chief Operating Officer

Chief Technology Officer

Non-executive Director

Non-executive Director

Company Secretary Stephen Austin

Chief Financial Officer William Patrick

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### Chairman's Statement

The transition from a private company to a publicly traded one is never easy. Being a public company requires an entirely different standard of performance in areas that are not usually considered key to the success of the business when it is privately held. It is a great credit to the leadership of any company if this transition is successfully accomplished with new shareholders and additional capital being brought into the picture. It is notable that Polarean (the "Group") has the distinction, at the time of writing, of being the only life-science IPO to be completed in London so far this year.

Polarean's technology solutions promise to bring critical new tools to physicians helping patients suffering from a wide range of pulmonary issues. The tools available today remain either limited in scope and accuracy or invasive and expensive. The unmet medical need is enormous. Fortunately, the steady advance of the state of the art in MRI technology, particularly faster data acquisition times, has enabled most scanners to acquire images, in detail and in 3D, in less than ten seconds. The widespread use of Magnetic Resonance Imaging ("MRI") systems in the US and Europe, makes available a very large installed base of scanners that can be used to implement Polarean's proprietary technology in a cost-effective manner, once it is approved for clinical use. The clinical trials to gain such approval are scheduled to start very soon and we expect them to be concluded within twelve months, following which the Company will need to prepare the New Drug Application (NDA) for submission to the FDA. The protocol for the trials has been set in collaboration with the FDA and Polarean and its clinical and scientific advisors believe the non-inferiority margins agreed with the FDA are achievable with the trial size and timeframe indicated. We continue to expect to launch clinically approved systems in early 2020.

Polarean's technology has been in development for almost 20 years and the Group's systems are already in use by researchers at over a dozen leading academic and medical institutions in the United States and Europe. One of these is the Cincinnati Children's Hospital where the team is working closely with Polarean, with funding from a grant provided by the Small Business Innovation Research Program, to develop applications in cystic fibrosis. Cystic fibrosis is one of the most debilitating conditions, especially in children and is particularly hard to diagnose, monitor and manage. This network of key opinion leaders who are working closely with the Group, creates an expanding group of knowledgeable experts who will be crucial in effecting broad adoption of the clinically approved technology by leading medical institutions in the US and elsewhere.

The team at Duke University, led by one of Polarean's founders, Professor Bastiaan Driehuys, is actively advancing the state of the art with new developments in critical areas such as gas exchange. These developments promise to facilitate the application of the technology in a range of additional conditions beyond ventilation, such as pulmonary fibrosis and pulmonary vascular disease, two diseases of increasing prevalence for which current diagnostic methods are very invasive and not very effective.

We believe Polarean has immense promise and the fact that it has reached this critical juncture is a great credit to the team in North Carolina who have brought it this far. The road ahead will no doubt present challenges but we face that journey with determination and high confidence in the strength of the technology and the commitment of the team.

Richard Morgan

Non-executive Chairman

12 June 2018

### **Chief Executive Officer's Statement**

#### 2017- A Year of Preparation and Accomplishment

The Group was formed on 31 May 2017 when Polarean Imaging Plc (the "Company" or "Parent Company") Company acquired Polarean, Inc (the "Subsidiary") and spent the remainder of the year working towards the Company's listing on AIM, which was successfully completed in the first quarter of 2018.

We were also busy making arrangements for our Phase III Clinical Trials and we achieved several critical milestones in research and development ("R&D") and manufacturing in support of those trials, including:

- engaging contract research organizations ("CROs") specializing in medical imaging non-inferiority trials like ours at the institutions where we are conducting the trials and then continuing to develop the plans for the trials in conjunction with those selected CROs;
- entering into contracts with the trial sites;
- preparing our quality systems and product documentation in order to outsource production to a local professional manufacturer who is already GMP-certified;
- continuing to develop and protect important intellectual property, adding to our dominant patent position; and
- identifying, evaluating and selecting a candidate, Linde who are one of the largest global industrial gas suppliers, and entering into agreements to package and distribute our proprietary <sup>129</sup>Xe drug, in preparation for the Phase III clinical trials. We are fortunate to have Nukem Isotopes GmbH as a strategic investor and supplier of our enriched <sup>129</sup>Xe raw material and we thank them for their support.

In addition, in late 2017 our R&D group significantly improved the performance of our polariser product, which has resulted in better images and has potentially reduced the amount of xenon required to be inhaled by the patient to make the images, thereby improving patient acceptance as well as our product economics, which your Directors and your clinical team consider to be a tremendous accomplishment.

#### The Opportunity

The US Healthcare annual burden of pulmonary disease is US\$150 billion and your Directors see a tremendous opportunity to bring our technology's quantitative, reproducible, non-invasive method for diagnostic and therapeutic guidance to medicine. We believe it will benefit patients, improve outcomes and reduce costs. This is important as the current cumulative global costs of asthma, COPD, emphysema, cystic fibrosis, idiopathic pulmonary fibrosis, interstitial lung disease, and pulmonary vascular disease are huge.

While working to achieve FDA approval for clinical use, Polarean continues to serve the medical imaging research market by providing xenon polarizers to enable functional MRI of the pulmonary system. This brings dynamic, high-resolution, regional, image based information to pulmonary physicians whose best alternative tool is spirometry, a relatively inaccurate measurement of expired breath. Current imaging technologies are not often used for assessing lung function, despite the revolutionary effects of MRI in other medical applications.

#### **Our Clinical Trial**

Our Phase III Clinical Trial is a head-to-head, non-inferiority trial which is comparing our technology to the 40 year old nuclear medicine technique using radioactive <sup>133</sup>Xe and gamma cameras. The trial involves 80 patients in total, and will be conducted at two of our closest collaborative sites, the University of Virginia and Duke University. We are characterising ventilation in two sets of patients being evaluated for surgical procedures: those who are being evaluated for lung lobar resection surgery and those being evaluated for lung transplant. In each case their preoperative expired vital capacity is measured through spirometry. Our technology and the existing nuclear medicine standard of care are used to assess the remaining post-operative vital capacities. Our trial focuses entirely on the preoperative assessment and it makes no difference whether the patient is chosen for surgery or not. We have to allow for an equivalence margin in order to be non-inferior. We expect the trial to proceed as planned to a successful outcome and anticipate the trial to result, in due course, in the Group receiving FDA approval to commercialise the product and process.

### **Chief Executive Officer's Statement**

continued

#### 2017 Financial Results

We encountered difficult market conditions when looking to quote the Company but we were pleased to raise £3 million (before expenses), in addition to the £0.7 million that was raised in December 2017 via the issue of convertible loan notes, in order to fund the clinical trials. In this phase of our development, with sales to academic institutions that are acquiring the technology predominantly by way of grant funding, our forecasting of revenue and price is typically on target but there are challenges in estimating the timing of the receipt of orders. We partly mitigate this by way of payment terms that include significant deposits, minimizing working capital timing effects. Operationally, our performance has been as expected, with revenue of US\$1.24 million and operating gross margins at over 50%.

#### 2018 and Beyond

In 2018, we look forward to commencing our clinical trial and the continued expansion of our installed base of systems through additional sales of research units to academic institutions. Our R&D focus has shifted slightly and is now mainly looking at the imaging of gas exchange and the regional assessment of lung tissue function, beyond ventilation, led by our founder and Chief Technology Officer, Dr. Bastiaan Driehuys at Duke University. The Directors have seen tremendous interest in pulmonary vascular disease as an emerging application, which is good news for the Group looking towards the future.

Polarean is fortunate to have an outstanding collection of world-class collaborators and customers in both the US and Europe. Additionally, we support the "129Xe MRI Clinical Trials Consortium" and the crucial work they do in collaborative research, training investigators, providing infrastructure for evaluating new techniques, and multi-institution sharing of magnetic resonance (MR) techniques and image analysis methods. We would like to thank the National Heart Lung and Blood Institute for their continued support of our Small Business Innovation Research Program grant with Cincinnati Children's Hospital Medical Center. In addition, we have developed solid working relationships with MRI systems manufacturers and exclusive relationships with global industrial gas suppliers, all key to our future as we scale the business.

On behalf of the entire staff of Polarean Imaging, I would like to thank you for your investment in and support of the Group and we look forward to continuing to develop and deliver this critical life-saving and life-improving technology to physicians and patients everywhere.

**Richard Hullihen** 

Chief Executive Officer

12 June 2018

#### 1. Introduction

The Group comprises medical drug-device combination companies operating in the high resolution medical imaging market. The Group develops equipment that enables existing MRI systems to achieve an improved level of pulmonary functional imaging and specialises in the use of polarised Xenon gas ( $^{129}$ Xe) as an imaging agent to visualise ventilation (the ability of air to reach the alveoli) and gas exchange (the ability of oxygen to diffuse through the alveolar membrane into the pulmonary vasculature) regionally down to the smallest airways of the lungs, the tissue barrier between the lung and the bloodstream and in the pulmonary vasculature; a novel diagnostic approach. The Group also develops and manufactures the high performance MRI radiofrequency (RF) coils which are a required component for imaging  $^{129}$ Xe in the MRI system. The development of these coils by the Group facilitates the adoption of the Xenon technology by providing application-specific RF coils which optimise the imaging of  $^{129}$ Xe in MRI equipment.

The Group was formed on 31 May 2017 when the Company acquired Polarean, Inc (the Subsidiary). The Subsidiary was formed as a result of two mergers: the first between Polarean Merger-Sub Inc. and m2m, a company that the Subsidiary had developed a relationship with during the course of previous research and commercialisation programmes in the US and the second between m2m and the Subsidiary. m2m was previously a portfolio company of Amphion Innovations plc ('Amphion'), developer of medical, life science, and technology businesses, which is itself currently quoted on AIM.

#### 2. Investment Case

Pulmonary disease currently affects hundreds of millions of people globally, including approximately 174 million people who suffer from Chronic Obstructive Pulmonary Disease (COPD), which is responsible for approximately 6% of all such deaths globally each year. In the US more than 30 million people suffer from a chronic lung disease such as COPD, which includes emphysema, chronic bronchitis and asthma. In addition to its significant human toll, pulmonary disease also represents an economic burden in excess of US\$150 billion annually in the US alone.

Every type of pulmonary disease involves some combination of ventilation and/or gas exchange impairment, yet the successful and cost-effective treatment of lung disease is hampered by sub-optimal methods for quantifying pulmonary ventilation and gas exchange. Current diagnostic techniques are either imprecise (such as spirometry) and/or expose the patient to potentially dangerous radiation (such as x-rays, CT scans and nuclear scintigraphy). While spirometry has benefits as a screening tool, none of these current methods can visualise ventilation or gas exchange regionally in the smallest airways, where lung disease typically begins and where improvements from new pharmaceutical therapies can first be detected.

As such, the Group operates in an area of significant unmet medical need and a number of key milestones are expected to be achieved by the Group over the next 12 to 24 months. The FDA has accepted the Group's Phase III trial design. The most important near-term milestone will be the successful completion of the FDA Phase III clinical trial in the US for the Group's technology. The proposed 80 patient non-inferiority trial will take place at Duke University Medical Center and the University of Virginia, two leading US research hospitals. The trial is expected to commence very soon and to last for approximately 18 months, which includes the time required to prepare the New Drug Application (NDA). Upon completion of the Phase III trial and filing of the NDA, the Directors anticipate receiving a broad indication for use from the FDA following the FDA's review period.

The Group's technology overcomes important limitations of current lung diagnostic methods, providing the ability to visualise, quantify and monitor both the structure and function of the smallest airways and alveolar spaces with enhanced sensitivity and without harmful radiation. This provides a unique, valuable and more precise tool to help diagnose disease earlier, identify the type of intervention likely to benefit a patient, monitor the efficacy of treatment and facilitate developing new therapies for pulmonary diseases.

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#### 3. Group Structure and History

The Company was incorporated in England and Wales on 24 October 2016 with company registration number 10442853. The Company's registered office is 27-28 Eastcastle Street, London, W1W 8DH.

Polarean Merger-Sub Inc., one of the companies involved in the first merger which resulted in the creation of the Subsidiary, was incorporated by the Subsidiary as a wholly-owned subsidiary incorporated in the US State of North Carolina on 23 November 2016. Polarean Merger-Sub, Inc. had its registered office at 2 South Salisbury Street, Raleigh, NC 27601 prior to being merged with and into m2m on 30 May 2017.

m2m, the company involved in both of the mergers which created the Subsidiary, was formed in the US State of Delaware on 18 February 1999 following the merger of spin out companies from Columbia University and the University of Queensland respectively, which was enabled by a financing round led by Amphion.

The Subsidiary was incorporated in the US State of North Carolina on 10 June 2011 and has its registered office at Wells Fargo Capitol Center, 150 Fayetteville Street, Suite 2300, Raleigh, NC 27601-2958.

On 17 May 2017 Polarean Merger-Sub, Inc. and m2m entered into a conditional agreement to complete the m2m Merger. The m2m Merger was conditional on completion of the Pre-Merger Fundraise. The m2m Merger and the Pre-Merger Fundraise were announced by Amphion on 31 May 2017. As a result of this transaction, the Subsidiary became the sole shareholder of m2m.

On 31 May 2017, following completion of the share exchange with the former shareholders of the Subsidiary, the Company became the sole shareholder of the Subsidiary. Thereafter, the Subsidiary's board of directors determined that it was in the best interests of the Group to simplify the Subsidiary's corporate structure by merging m2m with and into the Subsidiary, with the Subsidiary being the surviving entity. This internal restructuring was completed on 1 September 2017.

In December 2017 the Group raised £647,127 via the issuance of the convertible loan notes in order to progress key workstreams ahead of the commencement of the Phase III trials (the "Convertible Loan Notes"). The Convertible Loan Notes and any accrued interest automatically converted into fully paid ordinary shares at a conversion price equal to 90 per cent. of the placing price upon Admission. The Convertible Loan Notes have an interest rate of 10 per cent. per annum. The holder of each Convertible Loan Note was granted warrants to subscribe for ordinary shares at Admission. The number of warrants to be issued is equal to 20 per cent. of the par value of the Convertible Loan Notes held by each shareholder, divided by the placing price. The exercise period for the warrants is 12 months from Admission.

#### 4. Information on Polarean, m2m and Strategy of Group

#### 4.1 Polarean, Inc. - Background

The Subsidiary was co-founded by Dr Bastiaan Driehuys, a current Director of the Company, and John Sudol, a former director of the Subsidiary, in 2011. Prior to co-founding the Subsidiary, Dr Driehuys was a member of a research team at Princeton University in the early 1990s which was amongst the first research teams to focus on hyperpolarised gas MRI technology, in particular isotopically enriched Helium (<sup>3</sup>He), and developed and held key patents relating to the technology. The technology was acquired in 1999 by Amersham, Inc. ("Amersham"), with the goal of commercialising hyperpolarised Helium products to be marketed and distributed alongside Amersham's full line of contrast agent products. Dr Driehuys led the development efforts for Amersham, which continued the development of these hyperpolarised Helium products throughout the early 2000s until GE Healthcare ("GE") acquired Amersham in 2004.

GE continued the research and development of hyperpolarised gas MRI after the acquisition of Amersham, focusing on <sup>129</sup>Xe as a more effective substitute for <sup>3</sup>He in visualising ventilation. GE also began to explore ways in which <sup>129</sup>Xe could be used to image gas exchange within the lung in addition to ventilation. These work programmes culminated in the conduct of a Phase I/II clinical trial at Duke University in 2008-2009. GE also filed INDs with the FDA for both <sup>3</sup>He and <sup>129</sup>Xe.By 2010, after an investment of around US\$40 million in the technology and with the regulatory path for hyperpolarised gas remaining unclear, GE decided to out-license the hyperpolarised gas technology and the related patent families that it had developed and/or maintained to the Subsidiary, due to the scale at the time and the early stage nature of the technology's development.

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In December 2011, the Subsidiary negotiated the acquisition of all of GE's assets related to the hyperpolarised MRI project, including an inventory of polarisers and parts and the licenses (or outright ownership) of the related patent families.

Following the acquisition of GE's hyperpolarisation assets, the Subsidiary focused on three key objectives:

- building and selling polarisers to research users to generate operating revenue and to disseminate the technology to academic research institutions that generate clinical data in order to build additional interest in the technology;
- further developing the xenon hyperpolarisation technology in order to meet clinical use specification requirements; and
- liaising with the FDA in order to clarify the FDA regulatory path under which the product could achieve clearance to market for clinical use.

In July 2012, the US Congress passed the FDA Safety and Innovation Act and the Medical Gas Act, which clarified and simplified the path under which hyperpolarised gas MRI technology could be approved for clinical use by the FDA.

As a result of discussions between the Group and the FDA, the Directors believe that a clearer path towards regulatory approval now exists. As such, following Admission the Group intends to focus on conducting the clinical studies required for FDA approval to market.

Between 2012 and May 2017, the Subsidiary generated over US\$3.7 million of revenue from selling polarisers to customers in Canada, Germany, the UK and the US for research use, relating to both clinical (human) and pre-clinical (animal) applications. In addition, the Subsidiary received additional funding of approximately US\$2.5 million from Nukem and other Series A investors. Prior to the m2m Merger, the Subsidiary was also successful in receiving grant funding, including a US\$3 million grant awarded in April 2017 by the US National Heart, Lung and Blood Institute (NHLBI) following a competitive application process (for which the research will be conducted with its clinical collaborator, the Cincinnati Children's Hospital) and a US\$250,000 small business research loan from the North Carolina Biotech Center in March 2017, which was also awarded following a competitive application process.

#### 4. m2m Imaging - Background

Following its formation in 1999, m2m focused on the design and development of high performance MRI RF coils for the global research market. Primarily, m2m focused on the custom development of application-specific coils for multinuclei high field MR, known as micro-imaging. m2m also developed technologies and intellectual property relating to the use of cryogenics and high temperature superconductors for use in MRI RF coils.

Prior to the m2m merger, m2m had generated more than US\$8 million in revenue over the course of its lifetime from sales to academic and research institutions and major pharmaceutical companies in Canada, Germany, the UK and the US. In addition, m2m was ISO 9001 and ISO 13485 certified and certain serially produced products were CE marked. A significant percentage of m2m's products went to market embedded in the imaging systems of major system manufacturers, including Bruker, Siemens, Varian and Agilent, all of which had supply relationships in place with m2m.

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#### 4.3 Rationale for the m2m Merger

The Subsidiary developed a relationship with m2m as a result of various research programmes that both companies were involved with in the US.

Each new application in Xenon imaging requires new, clinically optimised, RF coils designed specifically for detecting the Xenon signals and currently the major manufacturers of MRI systems do not engage in early stage development of these RF coils. As such, both the Subsidiary and m2m agreed to execute the m2m Merger as Xenon-specific coils gate the use of Xenon on existing MRI systems. It is anticipated that having access to this coil technology will accelerate the development and use of the techniques that the Subsidiary has developed, thus removing a barrier to market entry for the Group's technology. In addition, as the applications of the Group's technology move beyond the initial pulmonary function, key elements of the proprietary technology platform which had initially been developed by m2m, specifically relating to the use of cryogenics in RF signal detection, may play a key role in enabling and improving the viability of these applications.

#### 4.4 The Group's Technology and Products

The Subsidiary is a clinical-stage company and its lead product has been designated as a drug-device combination by the FDA. The Subsidiary's product enables the visualisation of hyperpolarised <sup>129</sup>Xe ("**HPX**") via MRI technology to help diagnose lung disease earlier, identify the type of intervention likely to benefit a patient and to monitor the efficacy of treatment. As a result of the FDA's drug-device designation, the Subsidiary's products will be approved and sold only for use with each other. The products are currently being used at a number of research sites on a pre-FDA clearance basis to facilitate the research and evaluation of lung function, to assist in making improved disease progression assessment and to clearly visualise the effectiveness of several therapeutics which are under development. The Group currently generates revenue from the sale of its <sup>129</sup>Xe gas hyperpolarisation platform.

Implementing the Group's technology in a clinical setting is straightforward: prior to the MRI scan a patient breathes in a small amount of inert HPX to provide an extremely strong MRI signal. This transforms the MRI from a technology that is not applicable to the lungs into one that is able to provide multiple images of the lung structure and function in one 10-20 second breath-hold. HPX MRI overcomes the limitations of traditional pulmonary function testing as HPX MRI:

- is more accurate and reproducible than spirometry and other traditional pulmonary function tests, enabling the detection and mapping of small and localised changes in lung ventilation and gas exchange over time;
- provides regional information about lung disease without exposure to ionising radiation or radioactivity; and
- assesses ventilation and gas exchange in the smallest airways, where disease often begins.

The Group's technology works in conjunction with traditional MRI, transforming it into a powerful diagnostic modality for the lung. The Group's approach is to take <sup>129</sup>Xe, an inert gas, and hyperpolarise the nucleus to create an MRI signal which is approximately 100,000 times stronger than a conventional MRI signal. When the MRI scan is undertaken, the HPX resonates at different frequencies: (i) in the bronchioles and alveoli of the lung; (ii) in the barrier tissue of the lung; and (iii) when dissolved in arterial blood in the pulmonary vasculature, thus providing information on ventilation (the ability of air to reach the alveoli) and gas exchange (the ability of air to diffuse through the alveolar membrane into the pulmonary vasculature). As all pulmonary diseases result from impairments to the free flow of air through bronchioles, or from abnormal gas exchange between the lung alveoli and the pulmonary vasculature, the images that result from HPX MRI scans which have been executed using the Group's technology can aid diagnosis, as the physician's ability to clearly identify issues with ventilation and gas exchange on a regional basis, down to the smallest of airways, is enhanced.

Hyperpolarisation of the <sup>129</sup>Xe is accomplished by placing a non-radioactive isotope of Xenon (<sup>129</sup>Xe) into a beam of circularly polarised laser light in the presence of very small concentration of the alkali metal Rubidium, which acts as a physical catalyst in the hyperpolarisation process. The result is <sup>129</sup>Xe whose nuclear magnetic spin is highly aligned but not chemically or biologically different than unpolarised <sup>129</sup>Xe, an inert gas. This hyperpolarised state persists for around 2 hours allowing ample time to administer the HPX to the patient.

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The Group's products include:

- the <sup>129</sup>Xe gas, blended and made under GMP at high purity, to be polarised within the polariser;
- the polariser itself, of which the latest model, the Polarean 9820 Xenon Hyperpolariser, has been designed to deliver up to 3 litres of HPX per hour (approximately 5-10 doses) of which each dose is to be used within 30 minutes of its production in order to retain sufficient polarisation to create a strong image;
- the dose delivery inhalation bag, made of HPX-compatible impermeable plastic materials and a mouthpiece for ease of inhalation; and
- the Polarean 2881 Polarisation Measurement Station, which provides a calibrated measurement of the polarisation of hyperpolarised gas within the dose delivery inhalation bag.

The Group currently designs and builds the polariser equipment and has relationships with GMP gas producers to supply the Group with high purity  $^{129}$ Xe.

In order to take advantage of the Group's current products, an MRI machine is required to be outfitted with hardware and software capable of operating at <sup>129</sup>Xe frequency to detect the HPX signal. In addition, the patient will need to wear a <sup>129</sup>Xe RF chest coil to allow for detecting the HPX MR signal in the lungs. Approximately 35,000 MRI machines are currently in use worldwide and technically many of these can be easily adapted to be used with <sup>129</sup>Xe frequency. The Group's products can be placed near the MRI scanner for ease of radiology workflow and, following the m2m Merger, the Group has continued to explore ways to further integrate the Group's existing technology with the coils which had previously been the focus of m2m.

#### 4.5 Location

The Group is based at the Meridian Corporate Center, located in the Research Triangle Park area of North Carolina, which provides a favourable location at which to further develop the core technology and product range. The Group's facilities consist of more than 4,000 square feet of combined offices, laboratory space, inventory warehouse and assembly and testing areas. The Group benefits from facilities that were originally purpose-built by GE for the design and manufacture of hyperpolarisation equipment and components, pursuant to FDA-mandated guidelines.

Within these facilities are a dedicated research and development laboratory equipped with 3-phase power, central compressed air, specialty gas handling and distribution and separate heating, ventilation and air conditioning. The laboratory area also includes optical cell production equipment capable of simultaneous processing of four optical cells for Xenon applications. The laboratory is designed for safe operation of class 4 lasers and is equipped with laser power and spectral testing apparatus.

The Group also maintains a dedicated polariser test bed that is used for product development and a dedicated NMR system capable of delivering available electromagnetic field strength, utilised for calibrating absolute polarisation measurements of hyperpolarised gas samples.

#### 4.6 The Regulatory Environment

At present, prior to the receipt of any approvals for clinical use, the Group sells its polarisers and disposables for research use only to academic medical centres with their research being subject to oversight by their respective institutional review boards and the FDA or equivalent regulatory body.

The Group has held regular meetings with the FDA to develop a path towards approval for clinical use and the FDA has indicated its willingness to accept a very broad indication for use for the Group's technology – for the evaluation of pulmonary function – as opposed to its use being limited to any particular pulmonary disease or condition. The FDA has reviewed proposals for the Group's Phase III clinical trials and has provided clearance for the trials to take place. The Phase III trials include a total of 80 patients and the FDA has indicated that it will also accept existing literature-based data in fulfilment of certain safety and toxicology requirements. The Directors believe that this broad indication and limited clinical trial size provides the Group with a sizeable, addressable market at a modest clinical trial cost.

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#### 4.7 The Group's Customers

The Group's existing customer base already comprises some of the world's luminary medical imaging research institutions. Indeed, there are currently twelve research institutions worldwide utilising the Group's system and products, including Cincinnati Children's Hospital, the University of Virginia, University of Wisconsin – Madison and Duke University in the US, Robarts Research Institute and Hospital for Sick Children (SickKids) in Canada, the University of Oxford and the University of Nottingham in the UK and the Fraunhofer Institute for Toxicology and Experimental Medicine in Germany. At the date of this report, there are currently 17 Xenon Hyperpolariser units installed at these and several other leading research hospitals and the Group anticipates selling further units for research purposes during the course of the Phase III clinical trial.

#### 4.8 The Group's Suppliers

The Group has entered into Master Service Agreements with two CROs in relation to the Phase III trial. Pharma Start LLC, doing business as Firma Clinical Research, has been engaged to project manage the trial and will oversee the recruitment of patients for the trial. In addition, Icon Clinical Research Limited will assist with the medical imaging aspects of the trial.

The Group has a long-standing relationship with Nukem Isotopes GmbH, a leading global supplier of <sup>129</sup>Xe, the isotope of Xenon which is provided to the various gas blenders that in turn supply gas to the Group.

In December 2017 the Group signed a letter of intent ("**LoI**") with Linde Electronics and Speciality Gases, a division of Linde Gas North America LLC ("**Linde**"), in relation to a potential product supply agreement. Under the terms of the LoI, the Group and Linde have agreed to negotiate, prepare and sign a product supply agreement for the supply of industrial gas to the Group, subject to all required licenses and approvals being obtained by the parties.

#### 4.9 Current Trading and Prospects

Trading of the Group since IPO continues to be in line with the Directors' expectations. The potential of the Group's technology enables the Directors to view the future with confidence ahead of the commencement of the Phase III clinical trials and the exploitation of the addressable markets for the Group's technology.

#### 4.10 Growth Strategy

The Group estimates that in the short term it will generate additional revenue from the sale of hyperpolarisers to global research institutions and the Directors believe that the market for polarisers will grow as the technology gains wider acceptance as a tool for studying lung disease and for monitoring the effectiveness of therapeutics. At present, a number of major pharmaceutical companies are working with universities that are well known to the Group, regarding the use of HPX MRI technology to help guide clinical trials of developmental pharmaceutical products which is raising awareness of the Group's technology and product range.

The FDA have accepted the Group's Phase III clinical trial design and upon completion of the Phase III trial and subsequent FDA approval, the Group will adopt a traditional market entry strategy of building market awareness for its technology through key opinion leaders and a direct sales force to reach the key decision makers within its initial target market of large academic medical centres. In implementing this strategy, the Group benefits from more than 400 journal articles on the use of hyperpolarised gas MRI that are currently published in peer-reviewed journals. Over time, as more research centres purchase the Group's equipment and begin clinical studies, an increasing number of peer reviewed scientific articles are likely to be published, further enhancing the Group's credibility and raising awareness of the Group's technology. The Group also intends to continue patenting and in-licensing hyperpolarised gas technology IP to protect its current position.

Following completion of the Phase III trial and upon receipt of FDA clearance to market the technology, the Group's initial sales targets will be the radiology departments of top academic hospital organisations in the US, who are opinion leaders in the use of new diagnostic technologies and their application in a clinical setting.

Subsequently, the Group will seek to expand its sales and marketing teams. Because of the specialty nature of the Group's products in the pulmonary specialist market, which is concentrated in approximately 1,000 medical centres, the Directors believe that a small specialty sales force can be deployed effectively at reasonable cost.

The Group may also choose to partner with companies that offer complementary products.

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Furthermore, the Directors believe that the Group's products will benefit a number of clinical applications. While the Group's HPX MRI technology provides more specific information than currently available using existing lung diagnostic procedures (especially spirometry), the Group will focus its use on specific clinical conditions where the high accuracy of HPX MRI and greater cost are justified. The Directors do not believe that HPX MRI will replace low-cost spirometry as a general screening tool but believe that it should add value in more demanding clinical applications where HPX MRI addresses unmet diagnostic needs. These applications could include, but are not limited to, the following:

- the monitoring of COPD therapy, especially for the most severe cases;
- the management of cystic fibrosis exacerbations;
- a more efficient diagnosis of dyspnoea and the chronic cough;
- providing guidance for radiation therapy planning of lung cancer treatment;
- providing guidance for interventional pulmonology procedures including ablation and the placement of valves and stents;
- surgical procedure planning for lung transplant and volume reduction surgery;
- diagnosis of IPF and monitoring of IPF therapy; and
- diagnosis of PAH and monitoring of therapy.

The Directors will also seek to develop relationships with a range of strategic partners and will evaluate opportunities which will enable the Group to address its target markets globally, either alone or in collaboration with a partner.

### 5. Intellectual Property ("IP")

The Group's technology has been developed in four areas: (i) hyperpolarising gas; (ii) assuring the quality of the hyperpolarised gas; (iii) using the polarised gas in MRI applications; and (iv) developing and producing specialised RF coils to improve signal-to-noise ratios ("SNR").

GE had put a comprehensive patent policy in place to protect its technology from potential competitors. The Group is now the sole owner of this IP portfolio, which is based on 22 patent families, and when combined with the 7 patents that were previously owned by m2m, that were transferred to the Group following the m2m Merger, the Group's portfolio covers four broad types of patents:

- *imaging methods* these cover the imaging of a subject, or patient, who has inhaled a hyperpolarised noble gas and the functionality of the gas as a contrast agent. Newly licensed technology from Duke University extends the protection over these patents through to the early 2030s;
- hyperpolarisation methods these are Polarimetry patents covering the methods by which noble gases are
  polarised and the methods by which the resulting polarised gas is isolated and delivered to patients. The latest
  of these patents expire in the early 2020s;
- hyperpolarisation equipment these patents cover the multiple preferred mechanical design and automation elements of hyperpolarised equipment; and
- *RF coil patents* these patents cover the use of cryogenics to improve RF coils SNR and image quality and may play an important part in the next generation of applications such as neurological, cardiac and oncology imaging.

Polarean is committed to proactively developing further IP, both internally and through licensing arrangements with third parties, as part of the Group's overall growth strategy. The third parties are likely to include the Group's key collaborative academic sites, such as Duke University, that are seeking to develop emerging applications and technologies. Because of the Group's extensive patent portfolio and leading market position, the Directors believe the Group is an attractive licensing partner for academic research institutions that are interested in out-licensing such IP.

One such patent application (US15/120013), which is currently pending, relates to improving the overall efficiency of the hyperpolarisation process. This patent has also been exclusively licensed to the Group by Duke University. The Directors believe that this patent, if prosecuted successfully to issuance, would enable the Group to protect methods for increasing the level of hyperpolarisation significantly, which could improve the competitive economics of the Group's products. These patents are also pending in Europe and other international jurisdictions.

### 6. Principal risks and uncertainties

#### continued

The principal risks and uncertainties facing the Group are detailed below:

#### Early stage of operations

The Group's operations are at an early stage of development and there can be no guarantee that the Group will be able to, or that it will be commercially advantageous for the Group to, develop its proprietary technology. Further, the Group currently has no positive operating cash flow and its ultimate success will depend on the Directors' ability to implement the Group's strategy, generate cash flow and access capital markets.

#### Regulatory approvals and compliance

The Group will need to obtain various regulatory approvals (including FDA and EMA approvals) and otherwise comply with extensive regulations regarding safety, quality and efficacy standards in order to market its future products. These regulations, including the time required for regulatory review, vary from country to country and can be lengthy, expensive and uncertain.

#### Future funding requirements

The Group will need to raise additional funding or enter into a strategic partnership with industry partners to undertake work beyond that being funded by the Placing and Subscription. There is no certainty that this will be possible at all or on acceptable terms.

#### Dependence on key personnel

The success of the Group, in common with other businesses of a similar size, will be highly dependent on the expertise and experience of the Directors and key employees. However, the retention of such key personnel cannot be guaranteed. Should key personnel leave the Group's business, prospects, financial condition or results of operations may be materially adversely affected.

#### Intellectual property and proprietary technology

No assurance can be given that any current or future patent applications will result in granted patents, that the scope of any patent protection will exclude competitors or provide competitive advantages to the Group, that any of the Group's patents will be held valid if challenged or that third parties will not claim rights in or ownership of the patents and other proprietary rights held by the Group.

#### Technology and products

The Group is a manufacturer and service provider for noble gas polariser devices and ancillary instruments with a special focus on pulmonary imaging. The development and commercialisation of its proprietary technology and future products, which are in early stages of development, will require multiple series of clinical trials and there is a risk that safety and efficacy issues may arise when the products are tested. There is also a risk that there will be delays to the development of the products or that unforeseen technical problems arise as the Group's technology becomes increasingly automated. These risks are common to all new medical products and there is also a risk that the clinical trials may not be successful.

#### Research and development risk

The Group will be operating in the life sciences and medical device development sector and will look to exploit opportunities within that sector. The Group will therefore be involved in complex scientific research and industry experience indicates that there may be a very high incidence of delay or failure to produce results. The Group may not be able to develop new products or to identify specific market needs that can be addressed by technology solutions developed by the Group.

#### continued

#### Reliance on third parties

The business model for the Group anticipates that it will have limited internal resources over the next few years and that it will use third party providers wherever possible to conduct the research, development, registration, manufacture, marketing and sales of its proposed products. The commercial success of the Group's products will depend upon the performance of these third parties.

#### Manufacturing

There can be no assurance that the Group's proposed products will be capable of being manufactured in commercial quantities, in compliance with regulatory requirements and at an acceptable cost. The Group intends to outsource the manufacture of the raw materials and finished products required in connection with the research, development and commercial manufacture of its proposed products and, as such, will be wholly dependent upon third parties for the provision of adequate facilities and raw material supplies. 129Xe, the specific isotope of Xenon which is the active ingredient in the Group's drug-device product, is available from a limited number of suppliers and there can be no assurance that adequate supplies of this material at acceptable cost can be obtained. In addition, where the Group is dependent upon third parties for manufacture, its ability to procure the manufacture of the drug-device in a manner which complies with regulatory requirements may be constrained, and its ability to develop and deliver such products on a timely and competitive basis may be adversely affected.

#### Product development timelines

Product development timelines are at risk of delay, particularly since it is not always possible to predict the rate of patient recruitment into clinical trials. There is a risk therefore that product development could take longer than presently expected by the Directors. If such delays occur the Group may require further working capital. The Directors shall seek to minimise the risk of delays by careful management of projects.

#### General legal and regulatory issues

The Group's operations are subject to laws, regulatory restrictions and certain governmental directives, recommendations and guidelines relating to, amongst other things, occupational safety, laboratory practice, the use and handling of hazardous materials, prevention of illness and injury, environmental protection and animal and human testing. There can be no assurance that future legislation will not impose further government regulation, which may adversely affect the business or financial condition of the Group. Furthermore, as the Group already has some exposure to the UK market, there is a risk that possible changes resulting from the Brexit negotiations could lead to additional barriers to trade and regulatory divergence which could adversely affect the Group

#### Healthcare pricing environment

In common with other healthcare products companies, the ability of the Group and any of its licensees or collaborators to market its products successfully depends in part on the extent to which reimbursement for the cost of such products and related treatment will be available from government health administration authorities, private health coverage insurers and other organisations.

Richard Morgan

Non-executive Chairman

The Directors present their report on the affairs of Polarean Imaging plc (the "Company") and its subsidiaries, referred to as the Group, together with the audited Financial Statements and Independent Auditors' Report for the year ended 31 December 2017.

#### **Principal Activities**

The main activity of the Group is a drug device manufacturer and service provider for noble gas polarizer devices, its proprietary <sup>129</sup>Xe drug and ancillary instruments with a special focus on pulmonary imaging.

#### Results and Dividends

The financial performance for the year, including the Group's Statement of Comprehensive Income and the Group's financial position at the end of the year, is shown in the Financial Statements on pages 26 to 32.

The Directors do not recommend the payment of a dividend (2016: US\$nil).

#### **Going Concern**

The Group is in its development stage and has not yet moved to full commercial exploitation of its IP. During the year ended 31 December 2017 the Group recorded a loss after tax of US\$3,957,821 (2016: loss of US\$1,059,713) and a net cash outflow from operating activities of US\$2,615,691 (2016: US\$759,987).

On 21 December 2017 the Company raised proceeds of US\$0.9 million from investors by the issue of a convertible loan note. After the balance sheet date the Company raised a further US\$3.2 million net of costs from a placing and subscription of new shares on admission to AIM.

In considering the appropriateness of this basis of preparation, the Directors have reviewed the Group's working capital forecasts for a minimum of 12 months from the date of the approval of this financial information. Based on their consideration the Directors have reasonable expectation that the Group has adequate resources to continue for the foreseeable future and that carrying values of intangible assets are supported. Thus, they continue to adopt the going concern basis of accounting in preparing this financial information.

#### **Future Developments**

The Company's future developments are outlined in the Strategic Report on pages 6 to 14.

### Research Design & Development

Research and development is performed by employees of the company. The Group is committed to increasing its R&D budget to meet anticipated market demands for additional technology. In addition, the company also in-licenses technology from collaborative academic institutions. Details of R&D carried out during the year are contained in the Strategic Report.

#### Financial Risk Management

Financial risk management policies and objectives for capital management are outlined in the principal risks and uncertainties section of the strategic report on page 13 and in note 25 to the financial statements.

#### **Directors' indemnities**

The Group has made qualifying third-party indemnity provisions for the benefit of its Directors, which were made during the year and remain in force at the date of this report.

#### **Subsequent Events**

Details of significant events since the reporting period are contained in note 28 of the financial statements.

#### continued

#### **Directors**

The Directors who served the Company during the year and up to the date of this report were as follows:

Richard Morgan	(Appointed 30 May 2017)
Richard Hullihen	(Appointed 30 May 2017)
Kenneth West	(Appointed 30 May 2017)
Bastiaan Driehuys	(Appointed 30 May 2017)
Jonathan Allis	(Appointed 27 September 2017)
Robert Bertoldi	(Appointed 24 October 2016)
Juergen Laucht	(Appointed 30 May 2017)

The biographical details of the Directors of the Company are set out on the Company's website www.polarean.com

#### Directors' emoluments

2017

	Salary, Fees &		Share based		
	Bonus	Benefits	payments	Total	
	US\$	US\$	US\$	US\$	
Non-executive directors					
Richard Morgan	-	_	_	-	
Jonathan Allis	-	_	-	-	
Robert Bertoldi	-	-	-	-	
Juergen Laucht	-	-	-	-	
<b>Executive Directors</b>					
Bastiaan Driehuys	-	_	-	-	
Richard Hullihen (Note A)	155,714	8,059	-	163,773	
Kenneth West (Note B)	121,254	5,727	-	126,981	
Total			_		

Note A: Richard Hullihen agreed to a salary deferral in 2017. The amount included in salaries is US\$51,547. Note B: Kenneth West agreed to a salary deferral in 2017. The amount included in salaries is US\$46,392.

#### **Directors' interests**

The Directors who held office at 31 December 2017 and subsequent to year end had the following direct interest in the ordinary shares of the Company at 31 December 2017.

#### Directors' beneficial interests in shares of the Company:

		2017		2016
	2017 Number	Number (adjusted for share split)	2017 %	Number
Richard Morgan	-	-	-	-
Richard Hullihen	57,643	1,540,211	3.18	-
Robert Bertoldi	-	-	-	-
Kenneth West	8,087	216,085	0.45	8,087
Bastiaan Driehuys	449,401	12,007,994	24.77	449,401
Jonathan Allis	-	-	-	-
Juergen Laucht	-	-	-	-

After the reporting date, on 16 February 2018 the Company sub-divided its share capital on the basis of 26.71999:1. The number of Ordinary shares in issue in the Company at 31 December 2017 reflecting the sub-division was 48,470,160.

The shareholdings noted above include those shares held by connected persons of the individual director.

#### continued

#### Directors' beneficial interests in options to subscribe for additional shares of the Company:

	2017 Number	2017 Number (adjusted for share split)	2016 Number
Richard Morgan	-	-	-
Richard Hullihen	-	-	-
Robert Bertoldi	-	-	-
Kenneth West	10,000	267,200	10,000
Bastiaan Driehuys	30,000	801,600	30,000
Jonathan Allis	-	-	-
Juergen Laucht	-	-	-

Kenneth West's options have an exercise price of US\$0.90 (US\$.0337adjusted for share split). They were issued on 16 December 2015 and expire on 16 December 2025. 15,000 of Bastiaan Driehuys' options with an exercise price of US\$0.11 (US\$.00412 adjusted for share split) were issued on 15 December 2014 and expire on 15 December 2024 and 15,000 options with an exercise price of US\$0.90 were issued on 16 December 2015 and expire on 16 December 2025.

The options holdings noted above include those shares held by connected persons of the individual director.

On 20 April 2018, the Company issued 9,619,200 Options to certain directors, persons discharging managerial responsibilities ("PDMR") and employees. The exercise price for the Options is £0.15 being the price at which Polarean's Ordinary Shares were placed at Admission. The Options will vest in equal portions on an annual basis on the anniversary of Admission, over a four-year period from the date of Admission. The options term expires on 29 March 2028.

The following directors were a part of the grant of PDMR options were:

- Richard Morgan was granted 534,400 options;
- Richard Hullihen was granted 2,135,440 options;
- Robert Bertoldi was granted 534,400 options;
- Kenneth West was granted 1,646,018 options;
- Bastiaan Driehuys was granted 534,400 options;
- Juergen Laucht was granted 534,400 options; and
- Jonathan Allis was granted 534,400 under a separate option grant.

#### Directors' beneficial interests in warrants to subscribe for additional shares of the Company:

	2017 Number	2017 Number (adjusted for share split)	2016 Number
Richard Morgan	19,598	523,659	-
Richard Hullihen	-	-	-
Robert Bertoldi	19,598	523,659	-
Kenneth West	-	-	-
Bastiaan Driehuys	5,556	148,456	5,556
Jonathan Allis	-	-	-
Juergen Laucht	-		-

The warrants issued to Richard Morgan and Robert Bertoldi are part of the Amphion Warrants. They have an exercise price of £0.25. The warrants expire on 31 May 2018 unless the Company raises a minimum of \$5 million at £0.25 on or before 31 May 2018. The warrants issued to Bastiaan Driehuys have an exercise price of US\$0.01 (US\$.00037 adjusted for share split). The warrant holdings noted above include those shares held by connected persons of the individual director.

continued

#### Common, Options and Warrant Shares:

(On a fully-diluted basis)	Number of shares at 31 December 2017	% held at 31 December 2017	Number of shares at 31 May 2018	% held at 31 May 2018
Richard Morgan	19,598	0.8	1,093,059	1.12
Richard Hullihen	57,643	2.5	3,915,660	4.00
Kenneth West	8,087	0.8	2,033,218	2.08
Bastiaan Driehuys	449,401	20.8	13,612,451	13.91
Jonathan Allis	-	-	534,400	0.55
Robert Bertoldi	19,598	0.8	1,151,392	1.18
Juergen Laucht	-	=	534,400	0.55

Note: March 2018, the Company declared a stock split of 26.72:1.

#### Share option schemes

In order to provide incentive for the management and key employees of the Group, the Company awards stock options. The Directors will define a new plan in 2018 and implement. The existing options granted prior to the merger were converted to options in Polarean Imaging, Plc.

#### **Substantial Shareholders**

As well as the Directors' interests reported above, the following interests of 3.0% and above as at the date of this report were as follows at 31 December 2017 (on a fully-diluted basis):

	Number of shares, options or warrants	% held
Amphion Innovations plc	597,976	25.6
Bastiaan Driehuys	484,957	20.8
NUKEM Isotopes Imaging GmbH	252,462	10.8
John Sudol	282,265	12.1
W.B. Nominees Limited	188,260	8.06
Technology Commercialization Group	104,831	4.5
Kiarash Emami	80,500	3.5

Note: March 2018, the Company declared a stock split of 26.72:1.

#### **Corporate Responsibility**

The Board recognises its employment, environmental and health and safety responsibilities. It devotes appropriate resources towards monitoring and improving compliance with existing standards. The Executive Directors are responsible for these areas at Board level, ensuring that the Group's policies are upheld and providing the necessary resources.

#### **Employees**

The Group is committed to achieving equal opportunities and to complying with relevant anti-discrimination legislation. It is established Group policy to offer employees and job applicants the opportunity to benefit from fair employment, without regard to their sex, sexual orientation, marital status, race, religion or belief, age or disability. Employees are encouraged to train and develop their careers.

The Group has continued its policy of informing all employees of matters of concern to them as employees, both in their immediate work situation and in the wider context of the Group's well-being. Communication with employees is affected through the Board, the Group's management briefings structure, formal and informal meetings and through the Group's information systems.

## Statement of Directors' Responsibilities

The Directors are responsible for preparing the Strategic Report, the Directors' Report and the Financial Statements in accordance with applicable law and regulations.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have elected to prepare the financial statements in accordance with International Financial Reporting Standards (IFRSs') as adopted by the EU and applicable law.

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 Company and the Group and of the profit or loss of the Group for that period. In preparing these financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group's transactions and disclose with reasonable accuracy at any time the financial position of the Group and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

They are further responsible for ensuring that the Strategic Report and the Directors' Report and other information included in the Annual Report and Financial Statements is prepared in accordance with applicable law in the United Kingdom.

The maintenance and integrity of the Polarean Imaging plc web site is the responsibility of the directors; the work carried out by the auditors does not involve the consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred in the accounts since they were initially presented on the website. Legislation in the United Kingdom governing the preparation and dissemination of the accounts and the other information included in annual reports may differ from legislation in other jurisdictions.

#### **Auditors**

Each of the persons who are directors at the time when this Directors' report is approved has confirmed that:

- so far as that director is aware, there is no relevant audit information of which the Group and the Group's auditor is unaware; and
- that director has taken all the steps that ought to have been taken as a director in order to be aware of any relevant audit information and to establish that the Company and the Group's auditor is aware of that information.

Crowe Clark Whitehill LLP has expressed its willingness to continue in office and a resolution to re appoint the firm as Auditor and authorising the Directors to set their remuneration will be proposed at the forthcoming Annual General Meeting.

#### **Richard Morgan**

Non-executive Chairman

12 June 2018

## **Corporate Governance Report**

The Board is committed to proper standards of Corporate Governance, managing the Group in an efficient, effective, entrepreneurial and ethical manner for the benefit of shareholders over the longer term.

The Directors have adopted the requirements of the Quoted Companies Alliance's Corporate Governance Code for Small and Mid-Size Quoted Companies (the "QCA Code"), to the extent that they consider it appropriate having regard to the Company's size, board structure, stage of development and resources.

Jonathan Allis is currently the Company's only independent (as defined in the QCA Code) non-executive director. The Company acknowledges that the guidance in the QCA Code is for a company to have at least two independent non-executive directors. However, the Directors are satisfied that at Admission the Company's board composition is appropriate given the Company's size and stage of development. The Directors shall keep the position under regular review and to the extent additional independence is felt to be required on the Board, it shall be sought.

The Group acknowledges the new AIM Rules regarding Corporate Governance which were announced in March 2018 and will ensure they are implemented on a timely basis before the 28 September 2018 deadline

#### Board

The Group is run by the Board of Directors, which comprises four non-executive directors and three executive directors. As the business grows and becomes more complex it is anticipated that the Board will be added to.

The Board meets regularly and is responsible for the Group's corporate strategy, monitoring financial performance, approval of capital expenditure, treasury and risk management policies. Board papers are sent out to all directors in advance of each Board meeting including management accounts and accompanying reports from those responsible.

#### **Board Committees**

The Board has established an Audit Committee and a Remuneration Committee with delegated duties and responsibilities.

#### **Audit Committee**

Robert Bertoldi, Non-Executive Director, is Chairman of the Audit Committee. The other members of the Committee are Richard Morgan and Juergen Laucht. The Audit Committee is responsible for ensuring that the financial performance, position and prospects for the Group are properly monitored, controlled and reported on and for meeting the auditors and reviewing their reports relating to accounts and internal controls.

#### **Remuneration Committee**

Richard Morgan, Non-Executive Director, is Chairman of the Remuneration Committee. The other members of the Committee are Bastiaan Driehuys and Juergen Laucht. The Remuneration Committee is responsible for reviewing performance of Executive Directors and determining the remuneration and basis of service agreement with due regard for the UK Corporate Governance Code. The Remuneration Committee also determines the payment of any bonuses to Executive Directors and the grant of options.

#### **Nomination Committee**

The Company does not currently have a nomination committee, as the Board does not consider it appropriate to establish such a committee at this stage of the Company's development. Decisions which would usually be taken by the nomination committee will be taken by the Board as a whole. The Board as a whole will also be responsible for AIM compliance.

#### **Anti-Bribery Policy**

The Group has in place appropriate guidance, training and implementation of procedures to ensure compliance with the UK Bribery Act.

The Group is committed to the highest standards of personal and professional ethical behaviour. This must be reflected in every aspect of the way in which the Company operates.

The Group takes a zero-tolerance approach to bribery and corruption and we are committed to act professionally, fairly and with integrity in all our business dealings. Any breach of this policy will be regarded as a serious matter by the Company and is likely to result in disciplinary action and potentially the involvement of the police.

#### **Internal Control**

The Board is responsible for the Group's system of internal control and for reviewing its effectiveness. Such a system is designed to manage rather than eliminate risk of failure to achieve the business objectives and can only provide reasonable and not absolute assurance against material misstatement or loss.

## **Corporate Governance Report**

#### continued

The system of internal financial control comprises those controls established to provide reasonable assurance of:

- The safeguarding of assets against unauthorised use or disposal; and
- The maintenance of proper accounting records and the reliability of financial information used within the business and for publication

The key procedures of internal financial control of the Group are as follows:

- The Board reviews and approves budgets and monitors performance against those budgets on a monthly basis.
- The Group has clearly defined reporting and authorisation procedures relating to the key financial areas

#### **Share Dealing**

The Group has a Share Dealing Code, which will apply to any person discharging management responsibility, including the Directors and members of the senior management team and any closely associated persons and applicable employees.

The Share Dealing Code imposes restrictions beyond those that are imposed by law (including by FSMA and the Market Abuse Regulation (EU) No.596/2014 and other relevant legislation) and its purpose is to ensure that persons discharging managerial responsibility and persons connected with them do not abuse, and do not place themselves under suspicion of abusing, price-sensitive information that they may have or be thought to have, especially in periods leading up to an announcement of both financial results and the results of the Group's clinical trials. The Share Dealing Code sets out a notification procedure which is required to be followed prior to any dealing in the Company's securities.

#### **Communications with Shareholders**

The Group is strongly committed to the maintenance of good investor relations and seeks, wherever possible to be a relationship of mutual understanding with both its institutional and private client investors. Additionally, the Board seeks to meet with shareholder whenever possible and to use the Group's website <a href="https://www.polarean.com">www.polarean.com</a> to communicate with all shareholders.

The board also welcomes shareholders' enquiries, which may be sent via the Group's website.

## Polarean Imaging plc

#### **Opinion**

We have audited the financial statements of Polarean Imaging plc (the "Parent Company") and its subsidiaries (the "Group") for the year ended 31 December 2017, which comprise:

- the Group statement of comprehensive income for the year ended 31 December 2017;
- the Group and parent company statements of financial position as at 31 December 2017;
- the Group and parent company statements of cash flows for the year then ended;
- the Group and parent company statements of changes in equity for the year then ended; and
- the notes to the financial statements, including a summary of significant accounting policies.

The financial reporting framework that has been applied in the preparation of the financial statements is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union.

#### 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 2017 and of the Group's loss for the period then ended;
- the group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the parent company financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union as applied in accordance with the provisions of the Companies Act 2006; 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 under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which ISAs (UK) require us to report to you when:

- The directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- The directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Group's or the parent company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

#### Overview of our audit approach

#### Materiality

In planning and performing our audit we applied the concept of materiality. An item is considered material if it could reasonably be expected to change the economic decisions of a user of the financial statements. We used the concept of materiality to both focus our testing and to evaluate the impact of misstatements identified.

Based on our professional judgement, we determined overall materiality for the Group financial statements as a whole to be US\$190,000, which represents 5% of the Group's loss.

We use a different level of materiality ('performance materiality') to determine the extent of our testing for the audit of the financial statements. Performance materiality is set based on the audit materiality as adjusted for the judgements made as to the entity risk and our evaluation of the specific risk of each audit area having regard to the internal control environment.

Where considered appropriate performance materiality may be reduced to a lower level, such as, for related party transactions and directors' remuneration.

## Polarean Imaging plc

#### continued

We agreed with the Audit Committee to report to it all identified errors in excess of US\$6,000. Errors below that threshold would also be reported to it if, in our opinion as auditor, disclosure was required on qualitative grounds.

#### Overview of the scope of our audit

Polarean Imaging plc and its subsidiaries are accounted for from one operating location in North Carolina, USA. Our audit was conducted from the main operating location and all subsidiary companies were within the scope of our audit testing.

#### **Key Audit Matters**

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included 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.

This is not a complete list of all risks identified by our audit.

#### Key audit matter

## How the scope of our audit addressed the key audit matter

#### Revenue recognition

Revenue is a significant figure in these financial statements and is generated from various streams.

Our audit risk focuses on the risk that revenues may be overstated to meet market expectations. We specifically identified risks that either revenue transactions recorded in the year may not exist (the risk of fictitious revenue transactions) or that revenues transactions recorded in the year may not have been despatched to the customer before year end and therefore may have been recorded in the incorrect period.

The accounting policy is documented in note 3

We designed procedures to test each revenue stream and considered whether the revenue recognition policy applied to the revenue stream was appropriate. Our testing in this area included agreeing that revenue was appropriately recognised. This included cut off procedures.

# Accounting for the acquisition of the m2m technology and the subsequent group reconstruction

The Group acquired the m2m technology in the year in exchange for the issue of shares in the Subsidiary to the vendor, which has been accounted for as an acquisition of an asset or a group of assets that does not constitute a business.

The Company acquired the Subsidiary in the year in exchange for the issue of shares in the Company to shareholders in the Subsidiary. The Directors consider the acquisition of the entire issued common stock of the Subsidiary by the Company in exchange for equivalent equity participation in the Company to be a group re-organisation and not a business combination and to fall outside the scope of IFRS3.

We obtained management's assessment of the fair values of the m2m technology acquired by the Group during the year, together with the valuation of the intangible asset arising, as further explained in Note 3 to the financial statements. We challenged management on the valuation basis and assumptions.

We reviewed the basis of accounting for the acquired m2m technology and the group reorganisation.

Our audit procedures in relation to these matters were designed in the context of our audit opinion as a whole. They were not designed to enable us to express an opinion on these matters individually and we express no such opinion.

## Polarean Imaging plc

#### continued

#### Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

#### Opinion on other matter prescribed by the Companies Act 2006

In our opinion based on the work undertaken in the course of our audit

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the directors' report and strategic report have been prepared in accordance with applicable legal requirements.

#### Matters on which we are required to report by exception

In light of the knowledge and understanding of the group and the parent company and their environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us 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 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.

#### Responsibilities of the directors for the financial statements

As explained more fully in the directors' responsibilities statement set out on page 19, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the group's 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 the directors 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 for the audit of the financial statements

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 an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with 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 the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

## **Polarean Imaging plc**

#### continued

#### Use of our report

This report is made solely to the Group'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 Group'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 Group and the Group's members as a body, for our audit work, for this report, or for the opinions we have formed.

Stephen Bullock (Senior Statutory Auditor) for and on behalf of **Crowe Clark Whitehill LLP** Statutory Auditor London 12 June 2018

## **Consolidated Statement of Comprehensive Income**

for the year ended 31 December 2017

	Notes	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Revenue	4	1,237,163	880,645
Cost of sales		(297,215)	(488,888)
Gross profit		939,948	391,757
Administrative expenses		(4,051,000)	(1,282,313)
Depreciation	11	(7,478)	(4,747)
Amortisation	12	(361,746)	(4,600)
Selling and distribution expenses		(28,752)	(35,238)
Loss on contingent consideration revaluation		-	(5,000)
Share-based payment	19	(414,866)	(115,399)
Total administrative expenses		(4,863,842)	(1,447,297)
Operating loss	6	(3,923,894)	(1,055,540)
Finance income	7	129	147
Finance expense	7	(34,056)	(4,320)
Loss before tax		(3,957,821)	(1,059,713)
Taxation expense	10	-	-
Loss for the year and total other comprehensive expense		(3,957,821)	(1,059,713)
Loss per share			
Basic and diluted (US\$)	9	(3.71)	(0.99)

The results reflected above relate to continuing activities.

## **Consolidated Statement of Financial Position**

as at 31 December 2017

Non-current assets   12	17 201	2017	Notes	
Non-current assets   12	S\$ US	US\$		
Intangible assets				ASSETS
Property, plant and equipment         11         21,3           Trade and other receivables         14         12,5           Current assets           Inventories         15         649,8           Trade and other receivables         14         488,8           Cash and cash equivalents         16         960,2           TOTAL ASSETS         6,794,0           EQUITY AND LIABILITIES           Equity attributable to holders of the parent           Share capital         17         23,2           Share premium         18         1,448,0           Group re-organisation reserve         18         7,813,3           Other equity         18         87,3           Share based payment reserve         19         826,5           Retained losses         18         (6,758,10           Non-current liabilities         3,440,4           Non-current revenue         20         316,0				Non-current assets
Trade and other receivables       14       12,5         Current assets         Inventories       15       649,8         Trade and other receivables       14       488,8         Cash and cash equivalents       16       960,2         Company         TOTAL ASSETS       6,794,0         EQUITY AND LIABILITIES         Equity attributable to holders of the parent         Share capital       17       23,2         Share premium       18       1,448,0         Group re-organisation reserve       18       7,813,3         Other equity       18       87,3         Share based payment reserve       19       826,5         Retained losses       18       (6,758,10         Non-current liabilities       3,440,4         Non-current revenue       20       316,0          Deferred revenue       21	50 23,00	4,661,250	12	Intangible assets
Current assets   15	41 11,98	21,341	11	Property, plant and equipment
Current assets       15       649,8         Inventories       14       488,8         Trade and other receivables       14       488,8         Cash and cash equivalents       16       960,2         2,098,9         TOTAL ASSETS       6,794,0         EQUITY AND LIABILITIES         Equity attributable to holders of the parent         Share capital       17       23,2         Share premium       18       1,448,0         Group re-organisation reserve       18       7,813,3         Other equity       18       87,3         Share based payment reserve       19       826,5         Retained losses       18       (6,758,10         Non-current liabilities         Provision for contingent consideration       20       316,0         Deferred revenue       21	3,96	12,539	14	Trade and other receivables
Inventories	30 38,94	4,695,130		
Trade and other receivables       14       488,8         Cash and cash equivalents       16       960,2         2,098,9         TOTAL ASSETS       6,794,0         EQUITY AND LIABILITIES         Equity attributable to holders of the parent         Share capital       17       23,2         Share premium       18       1,448,0         Group re-organisation reserve       18       7,813,3         Other equity       18       87,3         Share based payment reserve       19       826,5         Retained losses       18       (6,758,10         Non-current liabilities         Provision for contingent consideration       20       316,0         Deferred revenue       21				Current assets
Cash and cash equivalents         16         960,2           2,098,9           TOTAL ASSETS         6,794,0           EQUITY AND LIABILITIES           Equity attributable to holders of the parent           Share capital         17         23,2           Share premium         18         1,448,0           Group re-organisation reserve         18         7,813,3           Other equity         18         87,3           Share based payment reserve         19         826,5           Retained losses         18         (6,758,10           Non-current liabilities         3,440,4           Non-current revenue         20         316,0           Deferred revenue         21	50 321,66	649,860	15	Inventories
2,098,9   TOTAL ASSETS   6,794,0	61 16,03	488,861	14	Trade and other receivables
TOTAL ASSETS         6,794,0           EQUITY AND LIABILITIES           Equity attributable to holders of the parent         Share capital         17         23,2           Share premium         18         1,448,0           Group re-organisation reserve         18         7,813,3           Other equity         18         87,3           Share based payment reserve         19         826,5           Retained losses         18         (6,758,10           Non-current liabilities         3,440,4           Provision for contingent consideration         20         316,0           Deferred revenue         21	17 97,84	960,217	16	Cash and cash equivalents
EQUITY AND LIABILITIES Equity attributable to holders of the parent  Share capital 17 23,2 Share premium 18 1,448,0 Group re-organisation reserve 18 7,813,3 Other equity 18 87,3 Share based payment reserve 19 826,5 Retained losses 18 (6,758,10  Non-current liabilities  Provision for contingent consideration 20 316,0 Deferred revenue 21	38 435,54	2,098,938		
EQUITY AND LIABILITIES  Equity attributable to holders of the parent  Share capital 17 23,2 Share premium 18 1,448,0 Group re-organisation reserve 18 7,813,3 Other equity 18 87,3 Share based payment reserve 19 826,5 Retained losses 18 (6,758,10  Non-current liabilities  Provision for contingent consideration 20 316,0 Deferred revenue 21	68 474,48	6,794,068		TOTAL ASSETS
Equity attributable to holders of the parent           Share capital         17         23,2           Share premium         18         1,448,0           Group re-organisation reserve         18         7,813,3           Other equity         18         87,3           Share based payment reserve         19         826,5           Retained losses         18         (6,758,10           Non-current liabilities           Provision for contingent consideration         20         316,0           Deferred revenue         21				
Share capital       17       23,2         Share premium       18       1,448,0         Group re-organisation reserve       18       7,813,3         Other equity       18       87,3         Share based payment reserve       19       826,5         Retained losses       18       (6,758,10         Non-current liabilities         Provision for contingent consideration       20       316,0         Deferred revenue       21				EQUITY AND LIABILITIES
Share premium         18         1,448,0           Group re-organisation reserve         18         7,813,3           Other equity         18         87,3           Share based payment reserve         19         826,5           Retained losses         18         (6,758,10           Non-current liabilities           Provision for contingent consideration         20         316,0           Deferred revenue         21			ent	Equity attributable to holders of the paren
Group re-organisation reserve         18         7,813,3           Other equity         18         87,3           Share based payment reserve         19         826,5           Retained losses         18         (6,758,10           Non-current liabilities           Provision for contingent consideration         20         316,0           Deferred revenue         21	91	23,291	17	Share capital
Other equity         18         87,3           Share based payment reserve         19         826,5           Retained losses         18         (6,758,10           Non-current liabilities           Provision for contingent consideration         20         316,0           Deferred revenue         21	37	1,448,037	18	Share premium
Share based payment reserve	37 1,976,36	7,813,337	18	Group re-organisation reserve
Retained losses 18 (6,758,10 3,440,4 September 20 316,0 Deferred revenue 21	)5	87,305	18	Other equity
Non-current liabilities Provision for contingent consideration 20 316,0 Deferred revenue 21	45 238,17	826,545	19	Share based payment reserve
Non-current liabilities  Provision for contingent consideration 20 316,0  Deferred revenue 21	8) (2,800,287	(6,758,108)	18	Retained losses
Provision for contingent consideration 20 316,0 Deferred revenue 21	07 (585,747	3,440,407		
Provision for contingent consideration 20 316,0 Deferred revenue 21				
Deferred revenue 21			• •	
		316,000		
316,0	- 10,25	-	21	Deferred revenue
	00 326,25	316,000		
Current liabilities				Current liabilities
Trade and other payables 22 1,906,3	76 562,51	1,906,376	22	Trade and other payables
	23 104,54	1,104,723	23	
Deferred revenue 21 26,5	62 66,92	26,562	21	Deferred revenue
3,037,6	61 733,97	3,037,661		
TOTAL EQUITY AND LIABILITIES 6,794,0		6,794,068		TOTAL EQUITY AND LIABILITIES

These Financial Statements were approved and authorised for issue by the Board of Directors on 12 June 2018 and were signed on its behalf by:

### **Richard Morgan**

Non-executive Chairman

## **Company Statement of Financial Position**

as at 31 December 2017

	Notes	2017 US\$	2016 US\$
ASSETS			
Non-current assets			
Investment in subsidiaries	13	4,342,848	-
		4,342,848	-
Current assets			
Trade and other receivables	14	1,891,495	1
Cash and cash equivalents	16	23,106	-
		1,914,601	1
TOTAL ASSETS		6,257,449	1
EQUITY AND LIABILITIES Equity attributable to holders of the parent Share capital Share premium Merger reserve Other Reserve Share based payment reserve Retained losses	17 18 18 18 19 18	23,291 1,448,037 4,322,527 87,305 521,514 (956,714) 5,445,960	1 - - - - 1
Current liabilities		3,443,900	1
	22	25.742	
Trade and other payables	22	25,742	-
Borrowings	23	785,747	-
		811,489	
TOTAL EQUITY AND LIABILITIES		6,257,449	1

The loss for the financial year dealt with in the financial statements of the parent Company was US\$956,714 (2016: US\$nil).

These Financial Statements were approved and authorised for issue by the Board of Directors on 12 June 2018 and were signed on its behalf by:

#### **Richard Morgan**

Non-executive Chairman

## **Consolidated Statement of Changes in Equity**

for the year ended 31 December 2017

	Share capital US\$	Share premium US\$	Other equity US\$	Share based payment reserve US\$	Group re- org reserve US\$	Retained losses US\$	Total equity US\$
As at 1 January 2016	-	-	-	122,773	1,976,367	(1,740,574)	358,566
Comprehensive income Loss for the year	-	-	-	-	-	(1,059,713)	(1,059,713)
Transactions with owners							
Issue of shares Share-based payment	1 -	-	-	- 115,399	-	-	1 115,399
As at 31 December 2016	1	-	-	238,172	1,976,367	(2,800,287)	(585,747)
As at 1 January 2017	1	-	-	238,172	1,976,367	(2,800,287)	(585,747)
Comprehensive income Loss for the year Transactions with owners	-	-	-	-	-	(3,957,821)	(3,957,821)
Issue of shares	2,970	1,982,094	_	-	-	-	1,985,064
Share issue costs	-	(534,057)	-	173,507	-	-	(360,550)
Share-based payments	-	-	-	414,866	-	-	414,866
Group re-organisation	20,320	-	-	-	5,836,970	-	5,857,290
Convertible loans	-	-	87,305	-	_	-	87,305
As at 31 December 2017	23,291	1,448,037	87,305	826,545	7,813,337	(6,758,108)	3,440,407

## **Company Statement of Changes in Equity**

for the year ended 31 December 2017

	Share capital US\$	Share premium US\$	Other equity US\$	Share based payment reserve US\$	Merger reserve US\$	Retained losses US\$	Total equity US\$
As at 1 January 2016	_	-	-	-	_	-	-
Comprehensive income							
Loss for the year	-	-	-	-	-	-	-
Transactions with owners Issue of shares	1	-	-	-	-	-	1
As at 31 December 2016	1	=	-	-	-	-	1
As at 1 January 2017	1	-	-	-	_	-	1
Comprehensive income							
Loss for the year	-	-	-	-	-	(956,714)	(956,714)
Transactions with owners							
Issue of shares	23,290	1,982,094	-	_	4,322,527	-	6,327,911
Share issue costs	-	(534,057)	-	173,507	-	-	(360,550)
Share-based payments	-	-	-	348,007	-	-	348,007
Convertible loans	-	-	87,305	-	-	-	87,305
As at 31 December 2017	23,291	1,448,037	87,305	521,514	4,322,527	(956,714)	5,445,960

## **Consolidated Statement of Cash Flows**

for the year ended 31 December 2017

Cash flows from operating activities  Loss before tax  Adjustments for non-cash/non-operating items: Depreciation of plant and equipment Amortisation of intangible assets Increase in provision for contingent consideration Share based compensation Issue of warrants in lieu of fees Interest paid Interest received Write off share issuance costs  Operating cash flows before movements in working capital  (Increase)/Decrease in inventories	US\$	Year ended 31 December 2016 US\$
Loss before tax Adjustments for non-cash/non-operating items: Depreciation of plant and equipment Amortisation of intangible assets Increase in provision for contingent consideration Share based compensation Issue of warrants in lieu of fees Interest paid Interest received Write off share issuance costs  Operating cash flows before movements in working capital		
Depreciation of plant and equipment Amortisation of intangible assets Increase in provision for contingent consideration Share based compensation Issue of warrants in lieu of fees Interest paid Interest received Write off share issuance costs  Operating cash flows before movements in working capital	(3,957,821)	(1,059,713)
Amortisation of intangible assets Increase in provision for contingent consideration Share based compensation Issue of warrants in lieu of fees Interest paid Interest received Write off share issuance costs  Operating cash flows before movements in working capital		
Increase in provision for contingent consideration Share based compensation Issue of warrants in lieu of fees Interest paid Interest received Write off share issuance costs  Operating cash flows before movements in working capital	7,478	4,747
Share based compensation Issue of warrants in lieu of fees Interest paid Interest received Write off share issuance costs  Operating cash flows before movements in working capital	361,746	4,600
Issue of warrants in lieu of fees Interest paid Interest received Write off share issuance costs Operating cash flows before movements in working capital	-	5,000
Interest paid Interest received Write off share issuance costs Operating cash flows before movements in working capital	414,866	50,213
Interest received Write off share issuance costs Operating cash flows before movements in working capital	-	65,186
Write off share issuance costs  Operating cash flows before movements in working capital	34,056	4,320
Operating cash flows before movements in working capital	(129)	(147)
	-	
(Increase)/Decrease in inventories	(3,139,804)	(925,794)
(mercuse)/Becreuse in inventories	(328,199)	80,403
(Increase)/Decrease in trade and other receivables	(440,931)	119,492
Increase in trade and other payables	1,343,861	67,031
Decrease in deferred revenue	(50,618)	(101,119)
Cash used in operations	(2,615,691)	(759,987)
Income taxes	-	-
Net cash used in operating activities	(2,615,691)	(759,987)
Cash flows from investing activities		
Purchase of plant and equipment	(16,834)	(10,933)
Net cash used in investing activities	(16,834)	(10,933)
Cash flows from financing activities		
Issue of shares	2,481,808	-
Interest paid	(34,056)	(4,320)
Interest received	129	147
Proceeds from (repayment of) borrowings	1,047,014	(39,459)
Net cash generated by/(used in) financing activities	3,494,895	(43,632)
Net increase/(decrease) in cash and cash equivalents	862,370	(814,552)
Cash and cash equivalents at the beginning of year	002,570	
Cash and cash equivalents at end of year	97,847	912,399

## **Company Statement of Cash Flows**

for the year ended 31 December 2017

	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Cash flows from operating activities		
Loss before tax	(956,714)	-
Adjustments for non-cash/non-operating items:		
Share based payment expense	348,007	-
Operating cash flows before movements in working capital	(608,707)	-
Increase in trade and other receivables	-	-
Increase in trade and other payables	25,742	-
Cash used by operations	(582,965)	-
Income taxes	-	-
Net cash used by operating activities	(582,965)	-
Cash flows from financing activities		
Loans to related parties	(1,851,022)	-
Issue of notes and loans	832,579	-
Issue of shares	1,624,514	-
Net cash generated by financing activities	606,071	-
Increase in cash and cash equivalents	23,106	
Cash and cash equivalents at the beginning of period	-	-
Cash and cash equivalents at end of period	23,106	-

### **Notes to the Financial Statements**

#### 1 General information

The Company is incorporated under the laws of England and Wales under the Companies Act 2006. The registered number is 10442853 and its registered office is at 27-28 Eastcastle Street, London, W1W 8DH. The Company is listed on AIM of the London Stock Exchange.

The Company is the parent company of Polarean, Inc (the "Subsidiary", together the "Group"). The principal activity of the Group is developing next generation medical imaging technology. The Subsidiary is incorporated in the United States of America and has a registered office of 2500 Meridian Parkway #175, Durham, NC 27713, USA.

#### 2 Adoption of new and revised International Financial Reporting Standards

No new IFRS standards, amendments or interpretations became effective in 2017 which had a material effect on these Financial Statements.

At the date of approval of these Financial Statements, the directors have considered IFRS Standards and Interpretations, which have not been applied in these Financial Statements, were in issue but not yet effective.

#### New standards, amendments and interpretations

The following new standards have not been early adopted in this historical financial information:

- IFRS 9 "Financial instruments" effective 1 January 2018;
- IFRS 15 "Revenue from contracts with customers", effective 1 January 2018; and
- IFRS 16 "Leases", effective 1 January 2019.

The notes IFRS 15 Revenue from Contracts with Customers which is to be adopted for all accounting periods beginning on or after 1 January 2018. IFRS 15 introduces a five-step approach to revenue recognition based on the delivery of performance obligations and an assessment of when control is transferred. This differs from existing IAS 11 and IAS 18 which focus on the transfer of "risk and reward" as the point of recognition. An assessment of the impact of IFRS 15 has been completed. The review has concluded that revenue recognition under IFRS 15 is expected to be consistent with current practice for the Group's revenue and had IFRS 15 been applied in the current reporting period, it would not have had a material impact on the financial statements.

The Company also notes IFRS16 *Leases* which takes effect and will be adopted in 2019. This IFRS will require the Company to recognise the lease on its premises as both an asset and a rental commitment in its statement of financial position. Details of future obligations are disclosed in note 24(b). If IFRS 16 had been adopted at the balance sheet date, assets and liabilities increase by approximately US\$256,000 with an immaterial impact on the reported results.

IFRS 9 is applicable retrospectively and includes revised requirements for the classification and measurement of financial instruments. Key changes to accounting requirements under IFRS 9 which may be relevant to the Company include the requirement to apply a new impairment model based on expected loss in recognising impairment of financial assets including trade and other Receivables. This may result in the recognition of additional impairment losses against the carrying values of these financial assets, at a point in time which is earlier than under the current accounting policies. Management have assessed that the impact is likely to be immaterial to the financial statements.

### 3 Significant accounting policies

### Basis of preparation

These financial statements have been prepared in accordance with International Financial Reporting Standards as adopted by the European Union ("IFRS") and under the historical cost convention, as modified by the use of fair value for financial instruments measured at fair value. The financial statements are presented in United States Dollars ("US\$") except where otherwise indicated.

The principal accounting policies adopted in the preparation of the financial statements are set out below. The policies have been consistently applied to all the years presented, unless otherwise stated.

#### **Notes to the Financial Statements**

continued

#### 3 Significant accounting policies continued

#### **Basis of consolidation**

On 30 May 2017 Polarean Merger-Sub, Inc., a subsidiary of the Subsidiary, completed a merger process under which it acquired substantially all of the assets of m2m Imaging Corp ("m2m"), a portfolio company of Amphion Innovations plc engaged in the development of high performance MRI RF coils for the global research market, primarily in microimaging. By 2016 m2m had been inactive for several years due to an inability to raise funds. At the date of the merger the assets of m2m were its technology and patents. The merger was effected by way of court sanction in the process of which the Subsidiary acquired, through a special purpose entity, Polarean Merger Sub, Inc. the assets of another special purpose entity, m2m Merger Sub, Inc., with m2m Merger Sub, Inc. being the surviving entity. After the reporting date, on 1 September 2017, m2m Merger Sub, Inc. was merged into the Subsidiary with the Subsidiary being the surviving entity, the effect being that m2m Merger Sub, Inc. was collapsed and the Subsidiary had acquired the m2m assets.

As part of the arrangements for the merger 576,430 shares in the Subsidiary were issued to the former shareholders in m2m with the intention that all parties would exchange their stock in Polarean, Inc. for shares in the Group on a *pro rata* basis as soon as practicable.

The Directors consider the merger between the Subsidiary and m2m Acquisition, Inc. as a consequence of which the group acquired the exclusive worldwide rights to m2m's technology and patents does not meet the definition of an acquisition of a business as set out in IFRS3 and has therefore be accounted for as the acquisition of an asset or a group of assets that does not constitute a business.

IFRS3 requires that in such cases the acquirer shall identify and recognise the individual identifiable assets acquired (including those assets that meet the definition of, and recognition criteria for, intangible assets in IAS 38 Intangible assets) and to allocate the cost of the individual identifiable assets and liabilities on the basis of their relative fair values at the date of purchase. Such a transaction or event does not give rise to goodwill.

The provisional estimate of the fair value of the assets acquired under the merger arrangement of US\$4,999,996 represents the aggregate estimated value of the financial obligations of the former m2mshareholders which were converted into equity in m2m prior to the merger agreement

The Directors consider the acquisition of the entire issued common stock of the Subsidiary by the Company in exchange for equivalent equity participation in the Company to be a group re-organisation and not a business combination and to fall outside the scope of IFRS3. Having considered the requirements of IAS 8 and the relevant UK and US guidance, the transaction has been accounted for on a merger or pooling of interest basis as if both entities had always been combined, using book values, with no fair value adjustments made nor goodwill recognised.

#### Going concern

The financial statements have been prepared on the going concern basis.

The Directors consider the going concern basis of preparation to be appropriate in preparing the financial statements. The key conclusions are summarised below:

The Group is in its development stage and has not yet moved to full commercial exploitation of its IP. During the year ended 31 December 2017 the Group recorded a loss after tax of US\$3,957,821 (2016: loss of US\$1,059,713) and a net cash outflow from operating activities of US\$2,615,691 (2016: US\$759,987).

On 21 December 2017 the Group raised proceeds of US\$0.9 million from investors by the issue of a convertible loan note. After the balance sheet date the Group raised a further US\$3.2 million net of costs from a placing and subscription of new shares on admission to AIM.

In considering the appropriateness of this basis of preparation, the Directors have reviewed the Group's working capital forecasts for a minimum of 12 months from the date of the approval of this financial information. Based on their consideration the Directors have reasonable expectation that the Group has adequate resources to continue for the foreseeable future and that carrying values of intangible assets are supported. Thus, they continue to adopt the going concern basis of accounting in preparing this financial information.

#### **Notes to the Financial Statements**

#### continued

### 3 Significant accounting policies continued

#### Revenue recognition

Sale of goods

Revenue comprises the fair value of the sale of goods to external customers, net of applicable sales tax, rebates, promotions and returns. Revenue is recognised on the sale of goods when the significant risks and rewards of ownership of the goods have passed to the buyer and the amount of revenue can be measured reliably. Revenue on goods delivered is recognised when the customer accepts delivery and on services when those services have been rendered

#### Rendering of services

Revenue from a contract to provide parts and services is recognised in the period in which the services are provided in accordance with the stage of completion of the contract when all the following conditions are satisfied:

- the amount of revenue can be measured reliably;
- is it probable that the Group will receive the consideration due under the contract;
- the stage of completion of the contract at the end of the reporting period can be measured reliably, and;
- the costs incurred and the costs to complete the contract can be measured reliably.

Any unexpired portion of service contract or payment received in advance in respect of service contracts either partially completed or not started, are included in the deferred income and released over their remaining term.

#### Grant revenue

Grants are not recognised until there is a reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received. Grants are treated as deferred income and released to the income statement on the achievement of the relevant performance criteria.

#### Property, plant and equipment

Owned assets

Items of property, plant and equipment are stated at cost or deemed cost less accumulated depreciation and impairment losses. Cost includes the original purchase price of the asset and the costs attributable to bringing the asset to its working condition for its intended use. When parts of an item of property, plant and equipment have different useful lives, those components are accounted for as separate items of property, plant and equipment.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably.

#### Depreciation

Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. The estimated useful lives are as follows:

- Computer and IT equipment 33% straight line
- Leasehold improvements − 3 − 4% straight line
- Laboratory equipment 20% straight line

The residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, or if there is an indication of a significant change since the last reporting date.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within "other operating income" in the statement of income.

continued

## 3 Significant accounting policies continued

### **Intangible Assets**

Patents and related rights which are acquired through a business combination, are assessed by reviewing their net present value of future cash flows. Patents are currently amortised over their useful life, not exceeding 10 years.

Internally generated intangible assets – research costs are costs incurred in research activities and are recognised as an expense in the period in which they are incurred. An internally generated intangible asset arising from the development of commercial technologies is recognised only if all of the following conditions are met:

- it is probable that the asset will create future economic benefits;
- the development costs can be measured reliably;
- technical feasibility of completing the intangible asset can be demonstrated;
- there is the intention to complete the asset and use or sell it;
- there is the ability to use or sell the asset; and
- adequate technical, financial and other resources to complete the development and to use or sell the asset are available.

At this time the Directors consider that the Group does not meet all of those conditions and development costs are therefore recorded as expense in the period in which the cost is incurred.

#### Inventory

Inventories are measured at the lower of cost and net realisable value. The cost of inventories is based on the weighted average cost principle and includes expenditure incurred in inventories, adjusted for rebates, and other costs incurred in bringing them to their existing location.

#### Impairment of non-financial assets

Non-financial assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are reviewed at the lowest levels for which there are separately identifiable cash flows (cash-generating units).

Non-financial assets other than goodwill that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

#### Financial assets

Classification

The Group classifies its financial assets as loans and receivables. The classification depends on the purpose for which the investments were acquired. Management determines the classification of its investments at initial recognition.

### Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments. They are initially recognised at fair value and are subsequently stated at amortised cost using the effective interest method.

#### Impairment of financial assets

Impairment provisions are recognised when there is objective evidence (such as significant financial difficulties on the part of the counterparty or default or significant delay in payment) that the Group will be unable to collect all of the amounts due under the terms receivable, the amount of such a provision being the difference between the net carrying amount and the present value of the future expected cash flows associated with the impaired asset.

### Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with an original maturity of three months or less.

continued

### 3 Significant accounting policies continued

#### Financial liabilities

Trade and other payables

Trade and other payables are initially recognised at fair value and subsequently measured at amortised cost. Accounts payable are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities.

#### Convertible debt

The proceeds received on issue of the Group's convertible debt are allocated into their liability and equity components. The amount initially attributed to the debt component equals the discounted cash flows using a market rate of interest that would be payable on a similar debt instrument that does not include an option to convert. Subsequently, the debt component is accounted for as a financial liability measured at amortised cost until extinguished on conversion or maturity of the bond. The remainder of the proceeds is allocated to the conversion option and is recognised in the "Other equity" within shareholders' equity, net of income tax effects.

#### **Borrowings**

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the income statement over the period of the borrowings using the effective interest method.

Borrowings are de-recognised from the statement of financial position when the obligation specified in the contract is discharged, is cancelled or expires. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in the income statement as other operating income or finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting period.

### **Employee benefits: pension obligations**

The Group operates a defined contribution plan. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

### **Provisions**

A provision is recognised in the statement of financial position when the Group has a present legal or constructive obligation as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, when appropriate, the risks specific to the liability. The increase in the provision due to the passage of time is recognised in finance costs.

#### Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in share premium as a deduction from the proceeds.

#### **Net finance costs**

Finance costs

Finance costs comprise interest payable on borrowings, direct issue costs, dividends on preference shares and foreign exchange losses; and are expensed in the period in which they are incurred.

Finance income

Finance income comprises interest receivable on funds invested, and foreign exchange gains.

Interest income is recognised in the income statement as it accrues using the effective interest method.

continued

## 3 Significant accounting policies continued

#### Leases

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. The costs associated with operating leases are taken to the income statement on an accruals basis over the period of the lease.

#### **Income tax**

Income tax for the years presented comprises current and deferred tax. Income 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 on the taxable income for the year, using tax rates enacted or substantively enacted at the statement of financial position date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised on temporary differences arsing between the tax bases of assets and liabilities and their carrying amounts.

The following temporary differences are not recognised if they arise from a) the initial recognition of goodwill, and b) for the initial recognition of other assets or liabilities in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred tax is determined using tax rates and laws that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred tax asset is realised or the deferred income tax liability is settled.

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. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes assets and liabilities relate to income taxes levied by the same taxation authority on either the taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

### Critical accounting estimates and judgements

The preparation of the Group's financial statements under IFRS as endorsed by the EU requires the directors to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities. Estimates and judgements are continually evaluated and are based on historical experience and other factors including expectations of future events that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

The directors consider that the following estimates and judgements are likely to have the most significant effect on the amounts recognised in the financial statements.

Carrying value of intangible assets, property, plant and equipment

In determining whether there are indicators of impairment of the Group's intangible assets, the directors take into consideration various factors including the economic viability and expected future financial performance of the asset and when it relates to the intangible assets arising on a business combination, the expected future performance of the business acquired.

continued

## 4 Segmental Information

IFRS 8 requires operating segments to be identified on the basis of internal reports about components of the Group that are regularly reviewed by the chief operating decision maker (which takes the form of the Board of Directors) as defined in IFRS 8, in order to allocate resources to the segment and to assess its performance.

The chief operating decision maker has determined that the Group has one operating segment, the development and commercialisation of gas polariser devices and ancillary instruments. Revenues are reviewed based on the products and services provided: Polarisers, Parts and Upgrade, Service and Other revenue.

The Group operates in Canada, Germany, the United Kingdom and the United States of America. Revenue by origin of geographical segment for all entities in the Group is as follows:

#### Revenue

	Year ended 31 December	Year ended 31 December
	2017	2016
	US\$	US\$
Canada	340,113	5,269
Germany	24,617	-
United Kingdom	111,765	38,433
United States of America	760,668	836,943
Total	1,237,163	880,645
Non-current assets	Year ended 31 December	Year ended 31 December
	2017	2016

	US\$	US\$
United States of America	4,695,130	38,946
Total	4,695,130	38,946

## Product and services revenue analysis

Revenue	Year ended	Year ended 31 December	
	31 December		
	2017	2016	
	US\$	US\$	
Polarisers	340,113	600,000	
Parts & Upgrade	91,529	46,022	
Service	154,528	131,866	
Grants	650,993	102,757	
Total	1,237,163	880,645	

Management measures revenues by reference to the Group's core services and products and related services, which underpin such income.

continued

## 5 Employees and Directors

Staff costs for the Group and the Company during the year:

Year ended	Year ended		
31 December	31 December	31 December	
2017	2016		
US\$	US\$		
837,619	356,762		
321,009	137,059		
1,158,628	493,821		
	31 December 2017 US\$ 837,619 321,009		

	Year ended	Year ended	
	31 December 2017	0 = = 0000===000	31 December 2016
	No.	No.	
Average number of employees (including directors)			
- Senior management including directors	5	2	
- R&D and clinical trial	7	2	
- Administration	1	1	
Total	13	5	

## Key management compensation

The following table details the aggregate compensation paid to key management personnel.

	Year ended	Year ended 31 December	
	31 December		
	2017	2016	
	US\$	US\$	
Salaries and fees	512,636	207,804	
Social security costs	196,462	79,833	
	709,098	287,637	

Key management personnel include all directors who together have authority and responsibility for planning, directing, and controlling the activities of the Group and senior divisional managers.

# 6 Operating loss

	Year ended	Year ended 31 December 2016 US\$
	31 December	
	2017	
	US\$	
Depreciation		
<ul> <li>Owned plant and equipment</li> </ul>	6,939	4,387
- Leased plant and equipment	539	360
Amortisation of intangible assets	361,746	4,600
Research expenses	167,655	145,443
Operating lease costs	68,335	59,984
Auditors remuneration (note 8)	143,792	-

continued

#### 7 Net finance costs

	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Interest income	129	147
Total finance income	129	147
Finance costs on loans	34,056	4,320
Total finance costs	34,056	4,320

## **8** Auditor remuneration

	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Auditors remuneration		
Fees payable to the Group's auditor for audit of Parent Company and Consolidated Financial Statements	45,237	-
Fees payables to the Group's auditor for other services (assurance related services)	98,555	-

## 9 Loss per share

The loss per share has been calculated using the loss for the year and the weighted average number of ordinary shares outstanding during the year, as follows:

Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Loss for the year attributable to shareholders of the Group (US\$) (3,957,821)	(1,059,713)
Weighted average number of ordinary shares* 1,066,516	1,066,516
Basic and diluted loss per share (3.71)	(0.99)

For diluted loss per share, the weighted average number of ordinary shares in issue is adjusted to assume conversion of all potential dilutive warrants, options and convertible loans over ordinary shares. Potential ordinary shares resulting from the exercise of warrants. options and the conversion of convertible loans have an anti-dilutive effect due to the Group being in a loss position. As a result, diluted loss per share is disclosed as the same value as basic loss per share.

Due to the nature of the share capital structure of the Group in 2016, the weighted average number of ordinary shares in 2017 has been used in 2016.

continued

## 10 Taxation

There were no charges to current corporate taxation due to the losses incurred by the Group in the period. No deferred tax assets have been recognised due to the uncertainty of reversal being dependant on future taxable profits. Income taxes computed at the statutory federal income tax of 35% (2016: 34%) and the state income tax of 3.30% (2016: 3.30%). UK corporation tax is calculated at 19.25% of the estimated assessable profits for the year.

	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Loss on ordinary activities before tax	(3,957,821)	(1,059,713)
Loss on ordinary activities multiplied by the rate of corporation tax in the US as above Effects of:	(1,385,237)	(370,900)
Adjustments for rate of tax in other jurisdictions	226,518	-
Unrelieved tax losses carried forward	1,158,719	370,900
Total taxation charge/(credit)	-	-

The tax reform act of 1986 contains provisions which limit the ability to utilise the net operating loss carryforwards in the case of certain events including significant changes in ownership interests. If the Group's net operating loss carryforward, the Group would incur a federal income tax liability even though net operating loss carryforwards would be available in future years.

## 11 Property, plant and equipment

			Computers	
	Leasehold	Furniture and	and IT	<b></b>
	improvements	equipment	equipment	Total
Cost	US\$	US\$	US\$	US\$
Cost		10.422	0.222	27.665
At 1 January 2016	=	19,433	8,232	27,665
Additions	2,695	8,238	-	10,933
At 31 December 2016	2,695	27,671	8,232	38,598
Additions	-	-	16,834	16,834
At 31 December 2017	2,695	27,671	25,066	55,432
Accumulated depreciation				
At 1 January 2016	-	17,122	4,744	21,866
Depreciation expense	360	2,394	1,993	4,747
At 31 December 2016	360	19,516	6,737	26,613
Depreciation expense	539	2,775	4,164	7,478
At 31 December 2017	899	22,291	10,901	34,091
Carrying amount		_		<u> </u>
At 31 December 2016	2,335	8,155	1,495	11,985
At 31 December 2017	1,796	5,380	14,165	21,341

continued

## 12 Intangible assets

	Patents US\$	Total US\$
Cost		
At 1 January 2016	46,000	46,000
Additions	-	-
At 31 December 2016	46,000	46,000
Additions – m2m (see note 3 – basis of consolidation)	4,999,996	4,999,996
At 31 December 2017	5,045,996	5,045,996
Accumulated amortisation		
At 1 January 2016	18,400	18,400
Amortisation expense	4,600	4,600
At 31 December 2016	23,000	23,000
Amortisation expense	361,746	361,746
At 31 December 2017	384,746	384,746
Carrying amount		
At 31 December 2016	23,000	23,000
At 31 December 2017	4,661,250	4,661,250

# 13 Investment in subsidiary undertakings

Company	Subsidiary Undertakings US\$
Cost	
At 31 December 2016	-
Additions	4,342,848
At 31 December 2017	4,342,848
Carrying amount	
At 31 December 2016	-
At 31 December 2017	4,342,848

The Directors annually assess the carrying value of the investment in the Subsidiary and in their opinion no impairment provision is currently necessary.

The net carrying amounts noted above relates to the Subsidiary.

The subsidiary undertakings during the year were as follows:

	Registered office address	Country of incorporation	Interest held %
Polarean Inc.	2500 Meridian Parkway #175, Durham, NC 27713, USA	USA	100

continued

## 14 Trade and other receivables

Amounts falling due after one		Group		Company	
		Year ended	Year ended	Year ended	Year ended
year		31 December	31 December	31 December	31 December
		2017	2016	2017	2016
		US\$	US\$	US\$	US\$
Deposit		12,539	3,961	-	-

	G	roup	Company	
Amounts falling due within one year	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Trade receivables	750	11,260	-	-
Other receivables	415,331	-	-	1
Prepayments	31,686	4,155	-	-
Due from Group undertakings	-	-	1,851,021	-
Called up share capital not fully paid	620	620	-	-
Due from borrowings	40,474	-	40,474	-
	488,861	16,035	1,891,495	1

Trade receivables disclosed above are classified as loans and receivables and are therefore measured at amortised cost. The Directors consider that the carrying amount of trade and other receivables approximates their fair value.

As at 31 December 2017, there were no receivables past due or considered to be impaired (2016: Nil).

All non-current receivables are due within five years from the end of the reporting period.

## 15 Inventory

	Group		
	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$	
Component parts	649,860	321,661	

## 16 Cash and cash equivalents

	Group		Company	
	Year ended Year ended		Year ended	Year ended
	31 December	31 December	31 December	31 December
	2017	2016	2017	2016
	US\$	US\$	US\$	US\$
Cash at bank and in hand	960,217	97,847	23,106	-

continued

## 17 Share capital

The issued share capital of the Company was as follows:

Allotted and called up - Ordinary shares of 1p each	2017 No.	2017 US\$	2016 No.	2016 US\$
At beginning of period	1	1	-	-
Issue of shares to subscribers	_	-	1	1
Sub-division	99	-	-	-
Issue of shares on group reorganisation	1,582,587	20,320	-	-
Issue of shares to investors	231,316	2,970	-	-
At end of period	1,814,003	23,291	1	1

The Company was incorporated on 24 October 2016 with issued share capital of £1 comprising 1 ordinary share of £1 each. On 30 May 2017 the share capital of the Group was divided into 100 ordinary shares of 1p each.

On 30 May 2017 the Company issued 1,582,687 new ordinary shares as consideration for the acquisition of 100% of the issued share capital of the Subsidiary.

On 31 May 2017, the Company raised US\$2 million of pre-IPO funding by way of the issue of 231,316 new ordinary shares at a price of £6.68 per share.

After the reporting date, on 16 February 2018 the Company sub-divided its share capital on the basis of 26.71999:1. The number of ordinary shares in issue in the Company at 31 December 2017 reflecting the sub-division was 48,470,142.

#### 18 Reserves

#### a) Group

#### **Share premium**

Share premium represents the excess of subscription amounts for the issue of shares over nominal value of shares issued, less any attributable share issue costs.

### Group re-organisation reserve

The group re-organisation reserve arose on the transaction under which the Group acquired the Subsidiary by way of a group re-organisation.

## Other equity

Includes the value of conversion rights on convertible loans.

#### Share based payment reserve

The share based payments reserves represents the fair value of options and warrants issued to shareholders in the Company including arrangements transferred from the Subsidiary on acquisition by the Group and the pre-IPO investment round.

#### **Retained losses**

Includes all current and prior year retained profits and losses.

## b) Company

#### **Share premium**

Share premium represents the excess of subscription amounts for the issue of shares over nominal value of shares issued, less any attributable share issue costs.

continued

#### 18 Reserves continued

#### Merger reserve

The merger reserve represents the fair value of the consideration given in excess of the nominal value of the ordinary shares issued by the Group to effect the acquisition of the Subsidiary. As permitted by s612 of the Companies Act 2006 share premium has not been recognised on the shares issue by the Group. As permitted by IAS 27, the net assets of the subsidiary at acquisition have been treated as the deemed cost of the Group's investment in its individual financial information.

#### Share based payment reserve

The share based payments reserves represents the fair value of options and warrants issued to shareholders in the Group including arrangements transferred from the Subsidiary on acquisition by the Group and the pre-IPO investment round.

#### **Retained losses**

Includes all current and prior year retained profits and losses.

## 19 Share based payments

#### Share options

The Company grants share options at its discretion to Directors, management and employees. These are accounted for as equity settled transactions. Should the options remain unexercised after a period of ten years from the date of grant the options will expire unless an extension is agreed to by the board. Options are exercisable at a price equal to the Company's quoted market price on the date of grant or an exercise price to be determined by the board.

Details of share options granted, exercised, lapsed and outstanding at the year-end are as follows:

	Number of share options 2017	Weighted average exercise price (US\$) 2017	Number of share options 2016	Weighted average exercise price (£) 2016
Outstanding at beginning of year	193,000	0.40	163,000	0.33
Granted during the year	=	-	30,000	0.90
Forfeited/lapsed during the year	-	-	-	-
Exercised during the year	-	-	-	-
Outstanding at end of the year	193,000	0.40	193,000	0.40
Exercisable at end of the year	161,101	0.35	137,129	0.26

### Polarean, Inc 2011 Plan

Between the date of adoption of the 2011 Plan on 1 December 2011 and 31 December 2016 the Subsidiary issued stock options in the Subsidiary to eligible participants. At 31 December 2016 the maximum number of option shares issuable under the Plan was 240,000. The exercise price of shares in the Subsidiary issued under the 2011 Plan shall be not less than the fair value of the underlying shares in the Subsidiary on the date of grant as determined by the board. Vesting terms may vary slightly but options generally vest over four years and are exercisable for a period of ten years from date of grant. No options were issued under the 2011Plan in the year ended 31 December 2017.

On 30 May 2017, by way of a Stock Option Substitution Agreement, the 193,000 outstanding 2011 options in the Subsidiary were substituted into 193,000 options over shares in the Company. The Stock Option Substitution Agreement did not vary or amend any of the terms and condition of the options granted.

No new options over shares in the Company were issued in the year ended 31 December 2017.

After the reporting date, on 16 February 2018 the Company sub-divided its share capital on the basis of 26.71999:1. The number of options outstanding in the Company at 31 December 2017 reflecting the sub-division was 5,156,960.

continued

## 19 Share based payments continued

The fair value of options granted has been calculated using the Black Scholes model which has given rise to fair values per share ranging from US\$0.06 to US\$0.58. This is based on risk-free rates ranging from 1.41% to 2.55% and volatility ranging from 52% to 61%.

The Black Scholes calculations for the options granted resulted in a charge of US\$66,859 (2016: US\$50,213) which has been expensed in the year.

The weighted average remaining contractual life of the share options is 6.2 years (2016: 7.2 years).

All share options are equity settled on exercise.

#### Share warrants

The Company grants share warrants at its discretion to Directors, management, employees, advisors and lenders. These are accounted for as equity settled transactions. Terms of warrants very from agreement to agreement.

Details for the warrants granted, exercised, lapsed and outstanding at the year-end are as follows:

	Number of share warrants 2017	Weighted average exercise price (US\$) 2017	Number of share warrants 2016	Weighted average exercise price (US\$) 2016
Outstanding at beginning of year	190,174	0.17	190,174	0.17
Granted during the year	149,101	0.19	-	=
Outstanding at end of the year	339,275	0.17	190,174	0.17
Exercisable at end of the year	163,617	0.12	145,388	0.17

Note: The figures stated here are pre the share consolidation.

On 1 December 2011, the Subsidiary issued share warrants for an aggregate of 20,000 ordinary in the Subsidiary ("2011 Warrants") in exchange for legal services. The exercise price of the 2011 Warrants is US\$0.001 per share and the options vested immediately and are exercisable for a period of 10 years after issuance. The 2011 Warrants are exercisable only for cash and subject to customary anti-dilution provisions.

On 3 June 2013, the Subsidiary issued share warrants for an aggregate of 31,917 shares in the Subsidiary ("2013 Warrants") in exchange for consulting services. The exercise price of the 2013 Warrants is US\$0.11 per share and vested ratably over 18 months and are exercisable for a period of 10 years after issuance. The 2013 Warrants are exercisable only for cash and subject to customary anti-dilution provisions.

On 21 April 2014, the Subsidiary issued shares warrants for an aggregate of 55,556 shares in the Subsidiary ("April 2014 Warrants") in exchange for extending the maturity date of the 2012 convertible notes from 31 December 2013 to 31 December 2015. The strike price of the April 2014 Warrants was US\$0.01 per share and vested immediately and were exercisable for a period of 10 years after issuance. The April 2014 Warrants are exercisable only for cash and subject to customary anti-dilution provisions.

On 3 December 2014, the Subsidiary issued common stock warrants for an aggregate of 72,914 shares of the Subsidiary's common stock ("December 2014 Warrants") in exchange for consulting services. The strike price of the December 2014 Warrants was US\$0.20 per share and the December 2014 Warrants vest ratably over 48 months and are exercisable for a period of 10 years after issuance. The December 2014 Warrants are exercisable only for cash and subject to customary anti-dilution provisions.

On 30 May 2017, by way of a Warrant Substitution Agreement the outstanding warrants in the Subsidiary were substituted into warrants over shares in the Company. The Warrant Substitution Agreement did not vary or amend any of the terms and conditions of the warrants granted.

continued

## 19 Share based payments continued

On completion of the m2m merger the Company granted a warrant of 5% of the issued share capital of the Subsidiary following the merger to Amphion Innovations Plc, Robert Bertoldi and Richard Morgan. A total of 97,993 warrants were issued pursuant to the Amphion Warrant Instrument.

On 31 May 2017 the Company granted 46,264 warrants to subscribers as part of the pre-merger fundraise on 31 May 2017 (Subscriber Warrants). These warrants can be exercised at any time from Admission to 25 May 2021.

As part of the pre-Admission fundraising which was completed in December 2017 the Company granted 4,844 warrants to subscribers (Pre-Admission Fundraise Warrants). These warrants can be exercised at any time from Admission to 25 May 2021.

After the reporting date, on 16 February 2018 the Company sub-divided its share capital on the basis of 26.71999:1. The number of warrants outstanding in the Company at 31 December 2017 reflecting the sub-division was 9,065,421.

The fair value of options granted during the year have been calculated using the Black Scholes model which has given rise to fair values per share ranging from US\$2,766 to US\$2,921. This is based on risk-free rates ranging from 1.44% and volatility ranging from 52%.

The Black Scholes calculations for the warrants granted during 2017 resulted in a charge of US\$348,007 (2016: Nil) which has been expensed in the year. In addition, fair value of warrants issued during 2017 in connection with fundraising of US\$173,507have been recognised within equity.

The weighted average remaining contractual life of the share warrants is 3.6 years (2016: 7.1 years)

### 20 Provision for contingent consideration

	Group		Company	
	Year ended	Year ended	Year ended	Year ended
	31 December	31 December	31 December	31 December
	2017	2016	2017	2016
	US\$	US\$	US\$	US\$
Provision for contingent consideration	316,000	316,000	-	-

On 19 December 2011, the Subsidiary entered into an agreement with a third party to purchase various assets, including patents, trademarks, a license agreement and physical inventory. As consideration for this transaction, the Subsidiary agreed to pay 5 per cent. of gross revenue on clinical sales of products that are sold related to the patents purchased, for seven years. As of 31 December 2017, the fair value of this contingent consideration was US\$316,000 (2016:316,000). This liability is valued based on a probability weighted expected return method using projected future cash flows. There were no significant events in the year ended 31 December 2017 necessitating revision of the probability weighted expected value of the contingent consideration.

There was therefore no profit or loss arising on revaluation of contingent consideration during the year ended 31 December 2017 (2016: loss of US\$5,000).

continued

### 21 Deferred revenue

	Group		Comp	any
	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Arising from service contracts			-	-
Current	26,562	66,923	-	-
Non-current	-	10,257	-	-
	26,562	77,180	-	-

## 22 Trade and other payables

	Group		Comp	any
	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Trade payables	711,363	151,725	-	-
Accruals and other payables	945,013	160,790	-	-
Royalties	250,000	250,000	25,742	-
	1,906,376	562,515	25,742	-

Trade payables and accruals principally comprise amounts outstanding for trade purchases and ongoing costs and are payable within 1 year.

The Directors consider the carrying value of all financial liabilities to be equivalent to their fair value.

## 23 Borrowings and loans

	Group		Company	
	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Related Party Loans	47,086	104,541	-	-
Note payable	265,750	-	-	-
Convertible Loan Notes	791,887	-	785,747	-
	1,104,723	104,541	785,747	-

In June 2013, an unsecured subordinated promissory note was issued to a related party for a principal amount of US\$8,000 per month for 18 months for a total of US\$144,000. The note bears interest at 3 per cent. per annum. All principal and outstanding interest on the note is due in 2018. The balance outstanding is US\$47,086 (2016: US\$104,541).

continued

## 23 Borrowings and loans continued

In April 2017, an unsecured loan note was issued for a principal amount of US250,000. The note bears interest at 6.75 per cent. per annum. All principal and outstanding interest on the note was due in April 2018. The Group received the initial 50 per cent. of the loan upon the completion of the loan agreement. Upon the completion of a mid-term project report, the Group will receive 40 per cent. of the loan whilst the remaining 10 per cent. will be received upon completion of the project. The interest on the loan notes can be converted on or prior to the maturity date to the value of 80 per cent. of the lowest price per share paid by other purchasers of the Equity Interest. The balance outstanding is US\$131,141 (2016: Nil).

In June 2017, an unsecured promissory note was issued for a principal amount of US\$150,000. The note bears interest of 6 per cent. per annum. All principal and outstanding interest on the note is due in 2018. The balance outstanding is US\$140,750 (2016: Nil).

In December 2017, an unsecured convertible loan note was issued for a principal amount of US\$903,000 (£647,147). Notes and accrued interest, at 10 per cent., automatically converted into fully paid Ordinary Shares at a conversion price equal to 90 per cent. of the Issue Price of the Ordinary Shares upon Admission. The holder of each convertible loan note were granted 129,425 warrants to subscribe for Ordinary Shares at Admission at the issue price. The exercise period for the warrants will be 12 months from Admission. The balance outstanding is US\$785,747 (2016: Nil).

#### Net debt reconciliation

	2017 US\$	2016 US\$
Cash and cash equivalents	960,217	97,847
Current borrowings	(1,104,723)	(104,541)
Non-current borrowings		-
Net debt	(144,506)	(6,694)

	Cash and cash equivalents US\$	Current borrowings US\$	Total US\$
Net debt at 1 January 2016	912,399	(144,000)	768,399
Cash flows Other non-cash movements	(814,552)	39,459	(775,093) -
Net debt at 31 December 2016	97,847	(104,541)	(6,694)
Cash flows Other non-cash movements	862,370	(1,047,014) 46,832	(184,644) 46,832
Net debt at 31 December 2017	960,217	(1,104,723)	(144,506)

continued

### 24 Commitments and contingencies

Periodically, the Group may be involved in claims and other legal matters. The Group records accruals for loss contingencies to the extent that management concludes that it is probable that a liability has occurred and the amount of the related loss can be reasonably estimated. No such accrual was deemed necessary for the year ended 31 December 2017 (2016: Nil) Legal fees and other expenses related to litigation are expensed as incurred and included in general and administrative expenses.

#### a) Royalty commitments

Royalties – The Subsidiary has entered into three agreements requiring royalty payments. One agreement is conditional and requires a payment of 5 per cent. of gross revenue on clinical sales during the payment period beginning on the date a product is first commercially sold, contingent on receiving FDA approval, and ending seven years from that date. A separate agreement requires payments of 0.25 per cent. of net sales of machines, and 20 per cent of any sublicensing income for a specific method of use of patent beginning in 2016. Additionally, beginning five years after the effective date of 1 February 2021, there are minimum yearly royalties of US\$5,000. The third agreement requires a fixed payment of US\$250,000 for use of patents.

#### b) Operating lease commitments

The Subsidiary has leased various properties under non-cancellable operating lease agreements. Operating Leases – Effective 30 January 2012, the Subsidiary entered into a lease agreement with a 40-month term with payments ranging from US\$3,961 to US\$5,907 per month. This lease agreement was extended through amendments, with a new effective termination date of 30 September 2021. The Subsidiary incurred rent expense for the year ended 31 December 2017 of US\$68,335 (2016: US\$59,984).

The future aggregate minimum lease payments under non-cancellable operating leases are set out below.

	Land & Buildings	
	2017 US\$	2016 US\$
No later than one year	72,205	63,713
Later than one year, and not later than five years	183,421	257,553
Total	255,626	321,266

The operating lease commitments for the rental of the property is calculated on a straight-line basis over the length of the lease.

continued

### 25 Financial instruments

The Group has exposure to the following key risks related to financial instruments:

- i. Market risk
- ii. Credit risk
- iii. Liquidity risk

This note presents information about the Group's exposure to each of the above risks, the Group's objectives, policies and processes for measuring and managing risk, and the Group's management of capital. Further quantitative disclosures are included throughout these consolidated Financial Statements.

The Group uses financial instruments including cash, loans, as well as trade receivables and payables that arise directly from operations.

Due to the simple nature of these financial instruments, there is no material difference between book and fair values, discounting would not give a material difference to the results of the Group and the Directors believe that there are no material sensitivities that require additional disclosure.

#### Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Subsidiary. In order to minimise the risk, the Subsidiary endeavours only to deal with companies which are demonstrably creditworthy and this, together with the aggregate financial exposure, is continuously monitored. The maximum exposure to credit risk is the value of the outstanding amount.

The Directors do not consider that there is any concentration of risk within either trade or other receivables. There are no impairments to trade or other receivables in each of the years presented.

### **Categories of financial instruments**

	Group		Company	
	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Cash and cash equivalents	960,217	97,847	23,106	-
Loans and receivables				
Trade and other receivables - current	488,861	16,035	1,891,495	1
Trade and other receivables - non-	12,539	3,961	-	-
Financial Liabilities measured at amortised cost Trade and other payables	1,906,376	562,515	25,742	-
Borrowings - current	1,104,723	104,541	785,747	-

continued

#### 25 Financial instruments continued

#### **Borrowings**

	Group		Company	
Financial Instruments	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$	Year ended 31 December 2017 US\$	Year ended 31 December 2016 US\$
Related Party Loans	47,086	104,541	-	-
Note payable	265,750	-	-	-
Convertible Loan Notes	791,887	-	785,747	-
Total	1,104,723	104,541	785,747	-

In June 2013, an unsecured subordinated promissory note was issued to Technology Commercialization Group, for whom Kenneth West was a retained consultant, for a principal amount of US\$8,000 per month for 18 months for a total of US\$144,000. The note bears interest at 3 per cent. per annum. The balance outstanding is US\$47,086 and US\$104,541 as of 31 December 2017 and 2016, respectively.

On 21 December 2017, the Company entered into subscription agreements with various investors pursuant to which the investors have agreed to provide the Company with a total of US\$903,000 (£647,147) in exchange for the issue of convertible loan notes. Notes and accrued interest are convertible in ordinary shares of 1 penny each at a conversion price equal to 90% of the issue price, a corresponding equity conversion feature of US\$87,305 has been recognised in other equity.

### Capital risk management

The Group manages its capital to ensure that it will be able to continue as a going concern while maximising returns to shareholders through the optimisation of debt and equity balances. The Group is both equity and debt funded and these two elements combine to make up the capital structure of the business. Equity comprises share capital, share premium and retained losses and is equal to the amount shown as 'Equity' in the statement of financial position. Debt comprises various items which are set out in further detail above and in note 23.

The Group manages the capital structure and makes adjustments to it in the light of changes to economic conditions and risks.

## (a) Market risk

The interest rate profile of the Subsidiary's borrowings is shown below:

#### Interest rate profile of interest bearing borrowings:

	2017		2016	
	Debt US\$	Interest rate	Debt US\$	Interest rate
Fixed rate borrowings Related party loans	24,852	6-10%	104,541	3%
Weighted average cost of fixed rate borrowings	24,852	8%	104,541	3%

Details of the above borrowings can be found in note 23 above.

#### Interest rate sensitivity analysis

As the interest rates on shareholders loans are fixed, interest rate risk is considered to be very low.

continued

### 25 Financial instruments continued

### (b) Liquidity risk

A maturity analysis of the Subsidiary's shareholder borrowings is shown below:

	2017	2016
	US\$	US\$
Less than one year	49,631	108,861
One to two years	-	-
Two to five years	-	-
Total including interest cash flows	49,631	108,861
Less: interest cash flows	(2,545)	(4,320)
Total principal cash flows	47,086	104,541

#### **Derivatives**

The Group and Company have no derivative financial instruments.

### 26 Contingent liabilities

The Directors are not aware of any material contingent liabilities.

## 27 Related party transactions

In June 2013, an unsecured subordinated promissory note was issued to Technology Commercialization Group, for whom Ken West was a retained consultant, for a principal amount of US\$8,000 per month for 18 months for a total of US\$144,000. The note bears interest at 3 per cent. per annum. All principal and outstanding interest on the note was due 3 June 2016. The balance outstanding is US\$47,086 and US\$104,541 as of 31 December 2017 and 2016, respectively.

## 28 Subsequent events

After the reporting date, on 16 February 2018 the Company sub-divided its share capital on the basis of 26.71999:1. The number of ordinary shares in issue in the Company at 31 December 2017 reflecting the sub-division was 48,470,142. The number of options outstanding in the Company at 31 December 2017 reflecting the sub-division was 5,156,960. The number of warrants outstanding in the Company at 31 December 2017 reflecting the sub-division was 9,065,421.

On 29 March 2018, the shares of Polarean Imaging Plc were admitted to trading on the AIM market of the London Stock Exchange ('Admission') where approximately US\$4.2 million (GBP 3 million) before expenses was raised through the placing of 20 million Ordinary Shares.

On the 11 April 2018, the outstanding loan to North Carolina Biotechnology Center for of US\$133,500, including accrued interest and principal, was repaid in conjunction with the terms of the loan which required repayment if the Company raised more than US\$2.6 million in a six-month period.

On 20 April 2018, the Group announced that it had formally allocated 9,619,200 options to certain directors, persons discharging managerial responsibilities ("PDMR") and employees and 534,400 options to Jonathan Allis. The exercise price for the options is £0.15 being the price at which Polarean's ordinary shares were placed at Admission. The options were granted at Admission pursuant to Polarean's Pre-Admission Share Option Scheme dated 12 December 2017 and will vest in equal portions on an annual basis on the anniversary of Admission, over a four-year period from the date of Admission. The options term expires on 29 March 2028.

continued

## 28 Subsequent events continued

The following directors and PDMRs were a part of the grant of options were:

- Richard Morgan was granted 534,400 options;
- Richard Hullihen was granted 2,135,440 options;
- Kenneth West was granted 1,646,018 options;
- Bastiaan Driehuys was granted 534,400 options;
- Robert Bertoldi was granted 534,400 options;
- Juergen Laucht was granted 534,400 options;
- William Patrick was granted 734,588 options;
- Kiarash Emami was granted 734,588 options;
- Neil Wadehra was granted 734,588 options; and
- Jonathan Allis was granted 534,400 options under a separate option grant.

Also, on 20 April 2018, the Company issued a total of 2,772 new Ordinary Shares to holders of convertible loan notes ("CLNs") that were issued in December 2017, when the Group undertook a pre-Admission fundraise, in lieu of interest payable on the CLNs (the "CLN Interest Shares").

The Company has a license agreement with Princeton University concerning its hyperpolarized noble gas imaging technology. The amount owed is US\$250,000, due May 2018. It has negotiated an agreement to an extension of that Note, to May 2019, in exchange for an agreement to pay Princeton US\$25,000 in June of 2018.

### 29 Control

The Group is under the control of its shareholders and not any one party. The shareholdings of the directors and entities in which they are related are as outlined within the Director's Report.

# **Notice of the Annual General Meeting**

## POLAREAN IMAGING PLC

(Incorporated in England and Wales under the Companies Act 2006 with company number 10442853)

#### NOTICE OF ANNUAL GENERAL MEETING

## THIS DOCUMENT IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION

If you are in any doubt as to what action you should take, you are recommended to seek your own financial advice from your stockbroker or other independent adviser authorised under the Financial Services and Markets Act 2000.

If you have recently sold or transferred all of your shares in Polarean Imaging plc, please forward this document, together with the accompanying documents, as soon as possible either to the purchaser or transferee or to the person who arranged the sale or transfer so they can pass these documents to the person who now holds the shares.

**NOTICE IS HEREBY GIVEN** that the first annual general meeting of Polarean Imaging plc (the 'Company') will be held at the offices of Reed Smith LLP at The Broadgate Tower, 20 Primrose Street, London EC2A 2RS at 2.00 p.m. on 18 July 2018 for the purpose of considering and, if thought fit, transacting the following business:

#### **ORDINARY BUSINESS**

To consider and, if thought fit, pass the following resolutions which will be proposed as ordinary resolutions:

- 1. To re-elect Richard Morgan as a director of the Company (a 'Director'), who retires under the provisions set out in the Company's Articles of Association (the 'Articles'), and who, being eligible, offers himself for re-election.
- 2. To re-elect Richard Hullihen as a Director, who retires under the provisions set out in the Articles, and who, being eligible, offers himself for re-election.
- 3. To re-elect Kenneth West as a Director, who retires under the provisions set out in the Articles, and who, being eligible, offers himself for re-election.
- 4. To re-elect Bastiaan Driehuys as a Director, who retires under the provisions set out in the Articles, and who, being eligible, offers himself for re-election.
- 5. To re-elect Jonathan Allis as a Director, who retires under the provisions set out in the Articles, and who, being eligible, offers himself for re-election.
- 6. To re-elect Robert Bertoldi as a Director, who retires under the provisions set out in the Articles, and who, being eligible, offers himself for re-election.
- 7. To re-elect Juergen Laucht as a Director, who retires under the provisions set out in the Articles, and who, being eligible, offers himself for re-election.
- 8. To appoint Crowe Clarke Whitehill as the auditors of the Company to hold office from the conclusion of the AGM to the conclusion of the next meeting at which the financial statements are laid before the Company.
- 9. To authorise the Directors to agree the remuneration of the auditors of the Company.

# **Notice of the Annual General Meeting**

#### SPECIAL BUSINESS

To consider and, if thought fit, pass the following resolutions as an ordinary resolution in respect of resolution 10 and as a special resolution in respect of resolution 11:

10. To generally and unconditionally authorise the Directors for the purpose of section 551 of the Companies Act 2006 (the 'Act'), in substitution for all existing authorities to the extent unused, to exercise all the powers of the Company to allot or grant rights to subscribe for or to convert any security into shares in the Company up to an aggregate number of 11,011,419 ordinary shares of £0.00037 each (being 15 per cent. of the total number of ordinary shares in issue as at the date of this notice),

**provided that** this authority shall expire on the earlier of 15 months after the date of passing of this resolution and the conclusion of the annual general meeting of the Company next following the passing of this resolution, save that the Company may, before such expiry, make an offer or agreement which would or might require shares or equity securities, as the case may be, to be allotted or such rights granted after such expiry and the Directors may allot shares or equity securities or grant such rights, as the case may be, in pursuance of such offer or agreement notwithstanding that the authority conferred by this resolution has expired.

- 11. Subject to the passing of resolution 10 above, to empower the Directors, pursuant to the general authority conferred on them and section 570 of the Act, to allot equity securities (within the meaning of section 560 of the Act) for cash as if section 561 of the Act did not apply to any such allotment, **provided that** this power shall be limited to the allotment of equity securities:
  - 11.1. made in connection with an offer of securities, open for acceptance for a fixed period, to holders of ordinary shares of the Company on the register on a fixed record date in proportion (as nearly as may be) to their then holdings of such shares (but subject to such exclusions or other arrangements as the Directors may deem necessary or expedient to deal with any legal or practical problems under the laws or requirements of any recognised regulatory body or any stock exchange in any overseas territory or in connection with fractional entitlements); and/or
  - 11.2. wholly for cash (otherwise than pursuant to paragraph 11.1 above) up to an aggregate number of 11,011,419 ordinary shares of £0.00037 each.

This authority shall expire on the earlier of 15 months after the date of passing of this resolution and the conclusion of the annual general meeting of the Company next following the passing of this resolution but the Company may, before such expiry, make an offer or agreement which would or might require shares or equity securities, as the case may be, to be allotted or such rights granted after such expiry and the Directors may allot shares or equity securities or grant such rights, as the case may be, in pursuance of such an offer or agreement notwithstanding that the power conferred by this resolution has expired.

By Order of the Board

Stephen Austin

Secretary

12 June 2018

Registered Office:

27-28 Eastcastle Street London W1W 8DH

# **Notice of the Annual General Meeting**

#### NOTES

- (1) A shareholder entitled to attend and vote at the meeting convened by this notice is entitled to appoint one or more proxies to exercise all or any of their rights to attend, speak and vote on their behalf at the annual general meeting. A proxy need not be a shareholder.
- (2) To appoint a proxy, shareholders should use the form of proxy enclosed with this notice of annual general meeting. Please carefully read the instructions on how to complete the form of proxy. For a proxy to be effective, the instrument appointing a proxy together with the power of attorney or such other authority (if any) under which it is signed or a notarially certified copy of the same must be deposited by 2.00 p.m. (BST) on 16 July 2018 with the Company's registrars, Share Registrars Limited of The Courtyard, 17 West Street, Farnham, Surrey, GU9 7DR, United Kingdom (the 'Registrars'). The completion and return of a form of proxy does not preclude a shareholder from subsequently attending and voting at the annual general meeting in person if he or she so wishes. If a shareholder has appointed a proxy and attends the annual general meeting in person, such proxy appointment will automatically be terminated.
- (3) Pursuant to Regulation 41 of Uncertificated Securities Regulations 2001, the Company specifies that only those shareholders on the register of members at 2.00 p.m. (BST) on 16 July 2018 or, if the meeting is adjourned, 48 hours before the time of the adjourned meeting (excluding any part of a day that is not a business day), shall be entitled to attend or vote at the annual general meeting in respect of the number of ordinary shares of £0.00037 each (the 'Ordinary Shares') registered in their name at that time. Changes to the register of members after that time shall be disregarded in determining the rights of any person to attend or vote at the annual general meeting.
- (4) Any Shareholder may insert the full name of a proxy or the full names of two alternative proxies of the Shareholder's choice in the space provided with or without deleting 'the Chairman of the meeting.' A proxy need not be a Shareholder, but must attend the meeting to represent the relevant Shareholder. The person whose name appears first on the Form of Proxy and has not been deleted will be entitled to act as proxy to the exclusion of those whose names follow. If this proxy form is signed and returned with no name inserted in the space provided for that purpose, the Chairman of the meeting will be deemed to be the appointed proxy. Where a Shareholder appoints as his/her proxy someone other than the Chairman, the relevant Shareholder is responsible for ensuring that the proxy attends the meeting and is aware of the Shareholder's voting intentions. Any alteration, deletion or correction made in the Form of Proxy must be initialled by the signatory/ies.
- (5) A shareholder may appoint more than one proxy provided that each proxy is appointed to exercise the rights attached to a different Ordinary Share or Ordinary Shares held by that shareholder. A shareholder may not appoint more than one proxy to exercise rights attached to any one Ordinary Share. If a shareholder wishes to appoint more than one proxy, they should contact the Registrars on 01252 821390, +44 1252 821390 from overseas. Lines are open from 9.00 a.m. to 5.30 p.m. Monday to Friday, excluding public holidays. Alternatively you may write to the Registrars at Share Registrars Limited, The Courtyard, 17 West Street, Farnham, Surrey, GU9 7DR, United Kingdom for additional proxy forms and for assistance.
- (6) Any corporation which is a shareholder can appoint one or more corporate representatives who may exercise on its behalf all of its powers as a shareholder provided that they do not do so in relation to the same Ordinary Share.
- (7) As at the close of business on the date immediately preceding this notice, the Company's issued share capital comprised 73,409,464 Ordinary Shares. Each Ordinary Share carries the right to vote at the Annual General Meeting and, therefore, the total number of voting rights in the Company as at close of business on the date immediately preceding this notice is 73,409,464.
- (8) A shareholder's instructions to the proxy must be indicated in the appropriate space provided. To abstain from voting on a resolution, select the relevant 'Vote withheld' box. A vote withheld is not a vote in law, which means that the vote will not be counted in the calculation of votes for or against the resolution. If no voting indication is given, your proxy will vote or abstain from voting at his or her decision. Your proxy will vote (or abstain from voting) as he or she thinks fit in relation to any other matter which is put before the meeting.
- (9) This form of proxy must be signed by the appointor or his attorney duly authorised in writing. The power of attorney or other authority (if any) under which the form of proxy is signed, or a notarially certified copy of the power or authority, must be received by the Registrars with the form of proxy. If the appointor is a corporation, the form of proxy should be signed on its behalf by an attorney or duly authorised officer or executed as a deed or executed under common seal. In the case of joint holders, the signature of any one of them will suffice, but the names of all joint holders should be stated.
- (10) CREST members who wish to appoint a proxy or proxies through the CREST Electronic Proxy Appointment Service may do so for the Annual General Meeting to be held at 2.00 p.m. (BST) on 18 July 2018 and any adjournment(s) thereof by following the procedures described in the CREST manual. All messages relating to the appointment of a proxy or an instruction to a previously-appointed proxy, which are to be transmitted through CREST, must be received by the Registrars (ID 7RA36) no later than 2.00 p.m. (BST) on 16 July 2018, or, if the annual general meeting is adjourned, 48 hours before the time fixed for the adjourned meeting (excluding any part of a day that is not a business day).
- (11) In order to revoke a proxy instruction you will need to inform the Company by sending a signed hard copy notice clearly stating your intention to revoke your proxy appointment to the Registrars. In the case of a shareholder which is a company, the revocation notice must be executed in accordance with note 12 below. Any power of attorney or any other authority under which the revocation notice is signed (or a duly certified copy of such power or authority) must be included with the revocation notice and must be received by the Registrars not less than 48 hours (excluding any part of a day that is not a business day) before the time fixed for the holding of the annual general meeting or any adjourned meeting (or in the case of a poll before the time appointed for taking the poll) at which the proxy is to attend, speak and to vote. If you attempt to revoke your proxy appointment but the revocation is received after the time specified then, subject to the paragraph directly below, your proxy appointment will remain valid.
- (12) A corporation's form of proxy must be executed under either its common seal, if any, or under the hand of a duly authorised officer or attorney, in each case as required under the laws of its relevant jurisdiction.