

# TRANSFORM

Academic Discoveries and U.S. Government Research into Commercial Product Breakthroughs



# CONTENTS

Highlights	1
Interim Management Report	3
Condensed Consolidated Statement of Comprehensive Income	21
Condensed Consolidated Statement of Financial Position	22
Condensed Consolidated Statement of Changes in Equity	23
Condensed Consolidated Statement of Cash Flows	24
Notes to the Condensed Consolidated Interim Financial Statements	25
Statement of Directors' Responsibilities	42
Company Information	42

# ALLIED MINDS PLC<sup>1</sup>

# Half-Yearly Report for the six months ended 30 June 2018

# HIGHLIGHTS

# (including post period-end)

# Investment highlights

- The Group invested \$12.3 million into its portfolio companies in the six months ended 30 June 2018
- In January 2018, the Group syndicated \$10.3 million of Spin Transfer Technologies' (STT or Spin Transfer) \$22.8 million convertible bridge facility underwritten by Allied Minds in October 2017
- In April 2018, Allied Minds led funding rounds at Orbital Sidekick (\$3.5 million) and at TableUp (\$4.0 million), receiving a significant minority stake in each company
- On 10 September 2018, BridgeSat announced it had raised \$10.0 million via a Series B funding round led by Boeing, with participation by Allied Minds
- Also on 10 September 2018, HawkEye<sup>360</sup> announced the second closing of its \$14.9 million Series A-3 funding round led by Raytheon Company (Raytheon), with participation from Sumitomo Corporation of America, Razor's Edge Ventures, Shield Capital, Space Angels and Allied Minds
- On 18 September 2018, Allied Minds announced the formation of QuayChain

# Subsidiary operational highlights

- STT met all of its development goals, demonstrating an increased efficiency with the Spin Polarizer and increased MRAM endurance with the Endurance Engine
- Following the Federal Communications Commission (FCC) announcement in July 2018 that it will authorise the Initial Commercial Deployment (ICD) of CBRS spectrum sharing for approved end-users, Federated Wireless submitted a formal application to participate in the ICD alongside 15 named partner end-users including wireless operators, cable operators, tower companies, Managed Service Providers (MSPs) and Original Equipment Manufacturers (OEMs)
- BridgeSat's Network Operations Centre is now operational alongside its first ground station. Boeing's recent investment in BridgeSat signals a broader relationship between the two companies
- HawkEye<sup>360</sup> has continued preparations for its Pathfinder launch planned for late 2018. The investment into HawkEye<sup>360</sup> by Raytheon is part of a broader partnership through which Raytheon would fuse HawkEye<sup>360</sup>'s geospatial information with other relevant data sources, augmenting its intelligence capabilities
- Precision Biopsy achieved IDE approval from the Food and Drug Administration (FDA) and has begun roll-in of patients for its pivotal Cohort B trial for ClariCore<sup>™</sup>, which is now expected to start in the first half of 2019

<sup>1</sup> Allied Minds plc is referred to as "Allied Minds" or "the Company". "The Group" refers to Allied Minds plc and its consolidated subsidiaries.

- SciFluor presented results of two trials for its topical eye drop treatment SF0166 in Diabetic Macular Edema (DME) and Wet-AMD. The design for Phase II trials for SF0166 has concluded and (post period-end) a sixmonth toxicity study was initiated. The first Phase II trial is expected to launch in the first half of 2019
- LuxCath formed a Scientific Advisory Board, appointed two independent directors with significant industry experience, hired a Chief Technology Officer, conducted pre-clinical studies, expanded its IP portfolio and partnered with a multinational contract manufacturer to support product development
- Signature Medical formed a Scientific Advisory Board, filed IP, advanced the development of its AcoustiCare™ sensor wearable monitor prototype, developed clinical and regulatory strategies, and began collection of human data to demonstrate signal detection and support algorithm development

# Financial highlights

- Net cash and investments\* at 30 June 2018: \$132.2 million (FY17: \$169.1 million), of which \$66.0 million held at parent level (FY17: \$84.2 million)
- Revenue: \$2.1 million (HY17: \$2.0 million)
- Income for the period: \$4.3 million (HY17: loss of \$58.2 million), of which \$12.5 million of loss attributable to Allied Minds (HY17: loss of \$44.6 million)
- The Directors estimate that as of 27 September 2018 the group Ownership Adjusted Value (OAV) was \$350.1 million (\$395.6 million as last reported)

# Other current period notable developments at Allied Minds plc

- On 23 May 2018 Rick Davis stepped down as a Non-Executive Director of the Company
- On 31 May 2018 the Company appointed Fritz Foley as a Non-Executive Director

Jill Smith, President and CEO of Allied Minds, commented

"During the period we secured financing for HawkEye<sup>360</sup> and BridgeSat with first rate strategic co-investors. These financings come with valuable broader partnerships and provide strong external validation, as well as substantial technical, distribution, network and other advantages. Following the successful financing of Federated Wireless in September last year, and with a strategic-led Series B round at STT pending, we expect our top four technology companies to have strong strategic co-investors. HawkEye<sup>360</sup>, Federated Wireless and STT are poised for commercialisation in 2019. Against this, Precision Biopsy and SciFluor have delayed the commencement of the next phase of their clinical trials by several months. We continue to focus on strengthening management and boards where appropriate, and have added several new executives, directors and advisors. Finally, we made investments in three companies, including one that was created by Allied Minds. All leverage and build on our core advantages, particularly in our focus areas in emerging space and connectivity."

<sup>\*</sup> includes excess cash in form of fixed income securities.

# INTERIM MANAGEMENT REPORT

# Overview

Allied Minds plc (Allied Minds or the Company or the Group) is an IP commercialisation company focused on early stage company creation and development within the technology and life science sectors. With origination relationships spanning US federal laboratories, universities, and leading US corporations, Allied Minds sources, operates and funds a portfolio of companies to generate long-term value for its investors and stakeholders. Based in Boston, Allied Minds supports its businesses with capital, management, expertise and shared services.

A key strength of the Group lies in its ability to access a wide range of innovative scientific research and technology via its relationships with leading U.S. research institutions and corporations, and the businesses and ecosystems it has built over a period of years. The Group focuses on maintaining strong connections with targeted institutions producing research output relevant to Allied Minds' investment theses and areas of expertise, including but not limited to space, connectivity, data and machine learning, medtech, and medical wearables.

The Group currently comprises of 15 active portfolio companies in the technology and life sciences sectors – 12 subsidiary businesses and 3 companies in which we have a minority ownership position.

# CEO update on strategy and the investment model

We continue to focus on our strategic imperatives to: accelerate progress to commercialisation and monetisation; and increase the pace of new investments, by driving:

- Syndication of post-seed round investments in our companies, focusing on relevant strategic and financial investors, to provide validation and acceleration and/or de-risking of the path to commercialisation and monetisation;
- Strong leadership, governance and accountability at all businesses; and
- Thematic investing, focusing on creating businesses based on theses and where we have competitive advantage, including leveraging relationships with targeted research institutions.

Excellent progress has been made in the technology portfolio, validated by the quality of the strategic and financial investors who provide tangible commercial benefits to our portfolio companies. In the year to date, Raytheon led HawkEye<sup>360</sup>'s Series A-3 round, which also included Sumitomo Corporation of America, Razor's Edge Ventures, Shield Capital and Space Angels, and Boeing led BridgeSat's Series B round.

I am particularly pleased to report on progress at STT. STT is in the final stages of consummating license and joint development agreements with two leading industry players, one of which is targeted at commercialising STT's Endurance Engine technology and the other targeted at developing and commercialising STT's Spin Polarizer technology. The first pending agreement involves STT granting a license to an industry leader to jointly develop and optimise STT's Endurance Engine technology for the embedded systems market. The second pending agreement grants STT a license to another industry leader's magnetics technology to be combined with STT's Spin Polarizer technology to develop and produce magnetics turnkey solutions to be licensed to foundries seeking an MRAM solution for the non-volatile and SRAM market segments. In combination with each of the commercialisation agreements, STT has entered into a conditional term sheet for a financing round led by the two potential strategic partners to provide necessary funding for the Company.

Federated Wireless recently confirmed that, under the FCC's Initial Commercial Deployment program (ICD), it has submitted applications to begin commercial activities in Q4 2018 with 15 end-users of its spectrum access

technology across multiple use-cases, at over 16,000 sites nationwide. FCC approval of this application is expected by late October, enabling commercialisation this year. Capitalising on its first mover advantage and CBRS industry leadership, Federated Wireless has contracts signed for the provision of spectrum allocation software services with Verizon, Telrad and Blinq, and several additional contracts under live negotiation.

HawkEye<sup>360</sup>'s Pathfinder launch is scheduled for late 2018, and is the key to commercialisation. The company has made good progress in building its commercial contract backlog with customers globally, and readying its first product: maritime domain awareness. Proceeds from the recent Series A-3 round will be applied to the development of the company's first commercial cluster, which is expected to be ready for launch in late 2019.

The commencements of the Cohort B Pivotal trial at Precision Biopsy and Phase II trial at SciFluor are behind plan by several months. Precision Biopsy is gathering more data using its Cohort B console ahead of the launch of its pivotal trial, which is now expected to start in the first half of 2019. SciFluor has initiated a six-month toxicity study enabling it to start its Phase II trial in the first half of 2019.

We have also taken measures to strengthen the leadership teams of our subsidiaries, and bolster their Boards and advisory boards. Key hires during the period include Adam Savakus (COO, Precision Biopsy), Bob Dempsey (Director, SciFluor), Terry Ransbury (CTO, LuxCath), Richard Randall and R. John Fletcher (Directors, LuxCath), and John Kispert (Chairman, STT). Advisory Boards have been instituted at LuxCath and Signature Medical, comprising highly respected senior figures in cardiology and electrophysiology, respectively.

We made three new investments in the year to date: TableUp; Orbital Sidekick (OSK); and QuayChain. The first two are minority investments, which add to or complement existing areas of expertise in connectivity and space respectively, in line with strategy. The third is a new company, majority-owned by Allied Minds, founded to bring connectivity and new supply chain applications to international cargo ports, as the first of its targeted Smart Industrial Hubs. We are continuing to build a pipeline of potential new business creation opportunities, leveraging the US university and federal laboratory ecosystem, networks and areas of strong competitive advantage.

I would like to thank shareholders for their ongoing support.

# Portfolio review

During the first half of 2018, the Group invested \$12.3 million into the Company's new and existing portfolio companies, which comprise of fully consolidated subsidiary businesses and companies in which we have a minority ownership position. Another \$9.3 million was invested by the Group subsequent to the period end.

An additional \$10.3 million was raised by STT from other existing investors in January 2018, syndicating a portion of the bridge financing put in place in October 2017, and \$16.1 million was invested in the financing rounds of BridgeSat and HawkEye<sup>360</sup> by other new or existing shareholders of those companies subsequent to the period end.

Allied Minds currently has operating control over all of its subsidiary businesses. In addition, it holds significant minority stakes in three companies - TableUp, Orbital Sidekick and HawkEye<sup>360</sup>.

# Technology

# Top six companies

# BridgeSat, Inc.

Formed in 2015, BridgeSat, Inc. (BridgeSat) is seeking to build an optical-based data delivery service that will enable data communications between satellites, the ground and inter-satellite at speeds of up to 10 Gbps. This represents substantial advances on current RF technology, with substantial potential cost savings. Other advantages include the fact that optical delivery does not use RF spectrum, which is a scarce resource with competing demands; does not suffer spectrum interference issues; and is more secure since the narrow optical beam is difficult to jam.

# Market size/dynamics:

• BridgeSat's first target market is the fast-growing LEO data downlink segment, currently estimated to be worth \$1.5 billion annually. BridgeSat is also engaged in the GEO satellite communications market, government and aviation-related applications

# 2018 MBOs:

- Successfully demonstrate end-to-end service: Network Operations Centre (NOC), at least one ground station, and customer pathfinder(s)
- Sign 2+ customer agreements; build strong commercial revenue backlog
- Acquire launch customers

### 2018 highlights to date:

- Denver Network Operations Center (NOC) completed and operational in January
- First optical ground station installed and operable at Sierra site
- Space terminal successfully launched with customer spacecraft and now undergoing in orbit testing
- In May 2018, announced agreements to provide space laser terminals and data services to ICEYE the world's first commercial microsatellite synthetic-aperture radar (SAR) constellation
- NICT (Japanese state funding IT institute) contract progressing with design review held in July 2018 in Tokyo
- Progressed development of advanced optical communications for future applications, increasing performance and quality, including filing 6 design patents
- Raised \$10.0 million in a Series B round led by Boeing, signaling a broader partnership with Boeing that
  is expected to provide BridgeSat with access to its experts, testing labs and other valuable resources to
  help scale BridgeSat's business. The round was completed at a pre-money valuation representing a modest
  increase on the post-money valuation of BridgeSat's Series A round.

# Federated Wireless, Inc.

Based in Arlington, Virginia, Federated Wireless plans to offer a cloud-based SaaS service that provides access to spectrum previously unavailable to commercial users by enabling government and commercial users to securely share the same spectrum band. Demand for more spectrum to meet the growing needs of wireless broadband, loT and next generation services is challenging existing allocation models and according to the FCC, "service quality is likely to suffer and prices are likely to rise" without new allocation models that address the expected shortage of usable spectrum. Shared spectrum use, pioneered by Federated Wireless, carries many of the advantages of licensed spectrum in terms of reliability and security, without the historically high costs of licensed spectrum auctions.

The shared spectrum model set for commercial launch in the U.S. covers 150 MHz of spectrum in the 3.5 Ghz (CBRS) band, which spectrum band previously had been allocated for use by the US Navy, but which was underutilised. The allocation and management of spectrum employing a shared-economy model is potentially highly disruptive to the wireless service business as a whole, enabling new service entrants such as cable providers, low cost and secure private LTE networks ideal for IoT, and high speed, low cost wireless broadband access.

### Market size/dynamics:

- First tranche of spectrum in the 3.5 GHz band (also known as Citizens Broadband Radio Service), made available for sharing, comprises 150 MHz, similar in quantum to the spectrum exclusively licensed by each of the large U.S. mobile network operators (MNOs)
- Potential for additional bands of spectrum to be offered up for sharing in the U.S., with other countries also examining whether to implement the spectrum sharing model, including the UK and Canada
- Federated Wireless estimates that the total addressable U.S. market for 3.5 GHz shared spectrum equates to more than 135 million access points, including 100 million home cable and broadband MSO installations; 30 million enterprise installations; and 5 million in last mile access installations for rural homes. Not included is additional demand expected from MNOs for network densification and underserved travel and commercial hubs. Assuming FCC certification in 2018 and adoption rates equivalent to wi-fi, it is estimated that the U.S. market could reach 5.4 million access points by 2022 (less than 4% of the total addressable U.S. market)

# 2018 MBOs:

- FCC certification
- Support multiple customer launches and realise commercial revenue
- Commence building out national availability of ESC network to meet customer requirements

# 2018 highlights to date:

- In late July 2018, the FCC announced it is seeking proposals for Initial Commercial Deployment (ICD) from CBRS Spectrum Access System (SAS) administrators. Under ICD, SAS administrators, such as Federated Wireless that successfully complete FCC lab testing will be permitted to operate in specified geographies, for specified periods
- On 10 September 2018, Federated Wireless announced that it had submitted a formal application to participate in ICD alongside 15 named partner end-users including wireless operators, cable operators, tower companies, Managed Service Providers (MSPs) and OEMs. Federated Wireless expects to scale

Interim Management Report

nationwide with nearly 16,000 deployment sites by customers in 47 states in the US and the District of Columbia

- Coincident with the expected timeframe for FCC approval of these ICD applications, Federated Wireless
  has announced it will launch in late October a new training program for Certified Professional Installers (CPI)
  of Citizens Broadband Radio Service Devices (CBSDs), which will help facilitate Federated Wireless' end-toend Spectrum Controller solution
- The majority of Federated Wireless' dedicated nationwide ESC network (sensors positioned on the US coasts to enable priority use of CBRS by the US Navy) has now been installed and completion of the full network is on track for delivery in Q1 2019, allowing for full access to the entire 150 MHz of 3.5 GHz spectrum. Federated Wireless' ESC network is expected to be the first in the market
- In May 2018, Federated Wireless jointly announced with Verizon, Ericsson and Qualcomm the first successful test of CBRS spectrum sharing in Verizon's live commercial network, demonstrating peak speeds of 790 Mpbs (more than 3x the speed of current LTE technologies)
- In April 2018, Verizon confirmed that it will ship handsets in 2018 that include CBRS compliant chipsets
- Federated Wireless now has contracts signed for the provision of spectrum allocation software services with Verizon, Telrad and Bling, and several additional contracts under live negotiation.

# HawkEye 360, Inc.

Formed in 2015 and based in Herndon, Virginia, HawkEye<sup>360</sup> is a data analytics company seeking to commercialise the capability to detect, independently geo-locate and analyse diverse RF signals from space. Using proprietary algorithms, HawkEye<sup>360</sup> aims to combine RF signals detection with other forms of geospatial information to produce contextually relevant analytics and reports for government and commercial end market applications. HawkEye<sup>360</sup> plans to operate clusters of 3 low earth orbit (LEO) small satellites flying in formation to provide independent data streams that can be used to accurately geo-locate diverse RF signals. Using proprietary algorithms, signals data will be used individually or in combination with multiple other data sources to deliver contextual, timely analysis and predictions related to sources of RF signals, such as ships and fishing vessels. Potential applications include emergency response support (search and rescue), transportation and logistics tracking, spectrum interference and coverage mapping, support for global health and humanitarian initiatives such as identification of illegal fishing and human trafficking, and support of national and global security activities.

# Market size/dynamics:

• There are multiple potential markets for HawkEye<sup>360</sup>'s products. Maritime Domain Awareness (the company's first planned product) is targeted at the satellite-based maritime surveillance solutions market which is estimated to have an annual value of \$1.75 billion between civil and commercial applications (excluding military), growing to an estimated \$2.2 billion by 2024

# 2018 MBOs:

- Successfully launch Pathfinder satellite cluster
- Launch Marine Domain Awareness (MDA) products and realise commercial revenue

# 2018 highlights to date:

• Pathfinder cluster built and all pre-launch testing complete

- Pathfinder launch planned for late 2018
- First planned product, Maritime Domain Awareness (MDA), in beta testing in preparation for release next year
- Continued commercial backlog build ahead of planned launch of the Pathfinder, the key to commercialisation
- In September 2018, completed a \$14.9 million Series A-3 funding round led by Raytheon with participation from Sumitomo Corporation of America, Razor's Edge Ventures, Shield Capital, Space Angels and Allied Minds. The pre-money valuation of HawkEye<sup>360</sup> was set at \$75 million. Proceeds from the Series A-3 round will be applied to the development of the company's first commercial cluster, which is expected to be ready for launch in late 2019.

# Spin Transfer Technologies, Inc.

Spin Transfer Technologies, Inc. (STT or Spin Transfer) is developing technology solutions that have the potential to materially enhance the endurance, speed and size characteristics of MRAM (magneto-resistive random access memory) – the emerging next generation memory technology. Spin Transfer believes these technologies hold the potential to unlock the widespread adoption of MRAM technology as a replacement for existing SRAM and DRAM. Based in Fremont, California, Spin Transfer was formed in 2006 and employs over 20 PhDs in fields including engineering, physics, materials sciences and mathematics. STT's three patented, universal technologies are:

- Endurance Engine circuitry designed to correct for inherent errors or non-idealities of MRAM, improving endurance by up to six orders of magnitude. The Endurance Engine also improves cell size, speed, power consumption, density and retention
- Spin Polarizer (also known as PSC) series of materials that can be layered onto a perpendicular magnetic tunnel junction (pMTJ – the core magnetics technology of MRAM) to improve switching speeds and increase efficiency by 40 – 70%, and reduce size by a corresponding amount
- 3D multi-level cell (3D-MLC) allows increases in densities to a level which, when combined with the Spin Polarizer and Endurance Engine, will allow MRAM to match or exceed the characteristics of DRAM

# Market size/dynamics:

• Through a phased roll-out of capabilities with partners, Spin Transfer expects first to target non-volatile memory (NVM) and embedded SRAM markets estimated at \$250 million and \$500 million respectively, followed by the \$1 billion storage class memory market (also known as MDRAM) and later DRAM with a total addressable market estimated to be worth \$20 billion

# 2018 MBOs:

- Successfully demonstrate the advantages of the Spin Polarizer and Endurance Engine
- Sign 2+ customer/partner agreements

2018 progress to date:

• Demonstrated efficiency gains of 40 – 70% when applying STT's Spin Polarizer to any MRAM device, enabling dramatic improvements in data retention (by a factor of >10,000x) with reduced power consumption. Results reported at the Intermag 2018 Conference

- Demonstrated up to six orders of magnitude endurance enhancement with a silicon based FPGA emulation of the Endurance Engine alongside STT's test chips, resulting in endurance levels of 10<sup>14</sup>, in line with DRAM endurance performance
- Appointed John Kispert as Independent Director and Chairman. John has over twenty-five years of experience in the semiconductor industry, most recently serving as a CEO of Spansion, Inc., prior to its merger with Cypress Semiconductor Corp.
- STT is in the final stages of consummating license and joint development agreements with two leading industry players, one of which is targeted at commercialising STT's Endurance Engine technology and the other targeted at developing and commercialising STT's Spin Polarizer technology
- The first pending agreement involves STT granting a license to an industry leader to jointly develop and optimise STT's Endurance Engine technology for the embedded systems market
- The second pending agreement grants STT a license to another industry leader's magnetics technology to be combined with STT's Spin Polarizer technology to develop and produce magnetics turnkey solutions to be licensed to foundries seeking an MRAM solution for the non-volatile and SRAM market segments
- Both agreements include a competitive revenue share stake for STT from future sales, which are currently forecasted to begin in late 2019
- In combination with each of the commercialisation agreements, STT has entered into a conditional term sheet for a financing round led by the two potential strategic partners to provide necessary funding for the Company

# Early stage

# Orbital Sidekick, Inc.

Orbital Sidekick, Inc. (Orbital Sidekick or OSK) is developing capabilities in aerial and space-based hyperspectral imaging and analytics, initially for the oil and gas industry. Orbital Sidekick's Spectral Intelligence<sup>™</sup> platform is designed to enable more efficient monitoring of natural resource assets and infrastructure integrity. The market for monitoring and surveillance of oil and gas assets is estimated at over \$4 billion annually. There are potentially multiple additional commercial and government applications for its technology. Since Allied Minds' investment in April 2018, Orbital Sidekick's first hyperspectral sensor was launched to the International Space Station, with testing expected to start later this year.

# QuayChain, Inc.

QuayChain, Inc. (QuayChain) plans to provide CBRS-enabled connected digital infrastructure at multi-user industrial locations such as international cargo ports and large industrial real estate complexes, enabling operators and users to secure efficiencies in supply chain management. QuayChain will create private LTE networks and will deploy proprietary connected devices and sensors. This infrastructure will enable a single IoT platform for the collection and analysis of real-time data across the Smart Industrial Hub. Applications will be developed to harness this data to improve the efficiency of existing supply chain work flow. QuayChain will work initially at key international cargo ports to build a CBRS network and deploy devices and sensors for use by the port and its users.

# TableUp, Inc.

TableUp, Inc. (TableUp) is a software provider enabling end-to-end transparency through the restaurant supply chain to enable more effective inventory and operations management. Allied Minds' minority investment in TableUp in April 2018 represents a first entry into a vertical market where efficiency gains in operations, supply chain management, marketing are expected to be unlocked through improved connectivity. TableUp is a revenue-generating company and has a relationship with Reyes Group LLC, one of the largest food and beverage distributors in the U.S.

# Life Sciences

# Top six companies

# Precision Biopsy, Inc.

Precision Biopsy's ClariCore<sup>™</sup> system uses spectral analysis to distinguish benign from cancerous prostate tissue in real time during the biopsy procedure, guiding the urologist, and potentially improving diagnosis rates while reducing pathology costs. The same technology is anticipated to be leveraged to produce accurate 3D mapping of prostate cancer tumours, which in turn builds the foundation for focal therapy using ClariCore<sup>™</sup>. Targeted focal therapy has the potential to replace certain prostatectomies, and to move treatment from the operating room to the clinic at significantly reduced cost and with fewer side effects. Today's standard of care involves a random biopsy of 12-14 cores under ultrasound guidance. Where routine biopsies of high risk patients fail to diagnose the cancer, physicians typically prescribe an MR Fusion biopsy which involves an MRI scan (typically in the hospital) followed by the biopsy (typically in the urology office). An MRI scan is expensive and has an estimated 10mm error margin. ClariCore<sup>™</sup> is estimated to have an error margin of 1mm, which is accurate enough for focal therapy, in which only the cancerous tissue is intended to be treated.

# Market size/dynamics:

- In the US, Precision Biopsy's ClariCore™ diagnostic product targets a c. \$1.5 billion segment of the estimated \$7 billion prostate cancer market, or approximately 1 million biopsies annually
- Precision Biopsy believes an estimated 100,000 prostate cancer patients may be eligible for 3D mapping, worth c. \$300 million annually in the U.S., plus an additional \$500 million US market for an integrated focal therapy device
- The European market is of a similar size to the U.S.

### 2018 MBOs:

- Gain CE Mark
- Complete Cohort B trial

2018 progress to date:

- Review of Cohort A data
- Received FDA IDE approval to initiate Cohort B Pivotal trial
- Initiated Cohort B roll-ins

- Initial results using the Cohort B consoles highlighted the need to gather more data using these consoles prior to the commencement of the Cohort B trial. We now expect the Cohort B Pivotal trial to start in the first half of 2019
- Preparations nearing completion for 3D Mapping FIM (first in man), expected to begin in H2 2018
- CE mark application postponed until start of Cohort B Pivotal trial
- On 10 July 2018, the company obtained its fourth issued patent, which relates to the diagnosis and treatment of tissue, and supports its ClariCore<sup>™</sup> system with 3D mapping and focal therapy claims
- Hired Adam Savakus as Chief Operating Officer. Adam is an accomplished medical device executive with direct experience driving successful operational, regulatory and marketing outcomes.

# SciFluor Life Sciences, Inc.

SciFluor Life Sciences, Inc. (SciFluor) is a drug development company focused on creating best-in-class compounds in the fields of ophthalmology, neuroscience and fibrosis. SciFluor's lead clinical asset, SF0166, is a topical eye droplet treatment for retinal diseases including Wet Age-related Macular Degeneration (Wet-AMD) and Diabetic Macular Edema (DME), both widely prevalent retinal diseases which can lead to blindness if left untreated. The company also has a pipeline of compounds in development being prepared to enter human testing. SciFluor is based in Cambridge, Massachusetts.

SF0166 is a fluorinated compound administered via daily topical eye droplets. SF0166 was invented by SciFluor scientists based in part on clinical results of a non-fluorinated molecular analog which addressed the same biological target and was deemed safe when administered systemically but which does not reach the retina. Precise and strategic fluorination provides SF0166 qualities intended to enable passage to the back of the eye when delivered as a droplet and also confers selectivity and potency. Current treatments for Wet-AMD and DME are derived from large and expensive molecules delivered via monthly injections to the back of the eye. SciFluor is in the planning and design phase for full Phase II trials for SF0166 in both indications as well as Diabetic Retinopathy, a precursor to DME.

Market size/dynamics:

- 20 million patients globally suffer from DME and 15 million suffer from Wet-AMD, with a further 150 million patients suffering from earlier stage Dry-AMD
- In 2017 worldwide combined revenue for Lucentis and Eylea, the two leading injectable drugs treating these diseases, exceeded \$8 billion. Ageing populations and the projected increased prevalence of diabetes are expected to drive future growth

# 2018 MBOs:

- Initiate at least one Phase II trial for SF0166
- Complete in-life IND enabling study for one new asset

2018 progress to date:

 SF0166 Phase I/II clinical data presented at multiple medical conferences including: Angiogenesis, Exudation, and Degeneration (February 2018); Association for Research in Vision and Ophthalmology (April 2018); World Ophthalmology Congress (June 2018)

- SF0166 Phase I/II clinical data published in the Journal of Pharmacology and Experimental Therapeutics
- Six-month sub-chronic toxicity studies for SF0166 commenced to support Phase II clinical development
- Study design for Phase II SF0166 trials completed
- SF0274 selected as development candidate for the treatment of fibrosis
- Appointed Robert Dempsey as an Independent Director. Bob has over twenty-five years' experience in the pharmaceuticals industry focusing on ophthalmology and is currently head of Shire's Global Ophthalmology Franchise.

# Early stage

# LuxCath, LLC

Based on technology originally sourced from George Washington University, LuxCath, LLC (LuxCath) is developing a proprietary ablation catheter technology to enable live, optical interrogation of heart tissue during cardiac ablation, allowing a cardiologist to assess on a real-time basis the impact of ablation therapy on targeted heart tissue. Current procedures are typically executed on a "blind" basis with the cardiologists unable to visually assess whether there is tissue contact before commencing ablation and unable to determine whether ablation has successfully killed target tissue, or left gaps between lesions which could lead to recurrence. LuxCath's technology is currently focused on Atrial Fibrillation (AF) ablation as its initial target market, but has potential application in all cardiac ablation procedures. The technology aims to improve clinical outcomes while reducing procedure times, fluoroscopy exposure, costs, and clinical recurrences. AF is the most common cardiac arrhythmia in the U.S., affecting more than two million people and projected to affect 15.9 million in the year 2050, half of whom will be over 80 years old. AF has been implicated as a significant cause of strokes, thromboembolic events, and heart failure, costing the U.S. healthcare system billions of dollars annually. Key milestones for LuxCath delivered in the year to date include:

- Engaged electrophysiology key opinion leaders from leading institutions to Scientific Advisory Board
- Conducted pre-clinical studies demonstrating core capabilities and value proposition of LuxCath technology
- Partnered with major multinational contract manufacturer to support product development
- Advanced development of the OmniView<sup>™</sup> system (LuxCath's next generation catheter system)
- Showcased OmniView<sup>™</sup> technology at Heart Rhythm Society 2018 in Boston and held SAB meeting
- Expanded IP portfolio worldwide; currently five issued patents protecting LuxCath technology
- OmniView<sup>™</sup> technology highlighted in several leading medical device trade journals and publications, including EP Lab Digest and MassDevice
- Appointed Terry Ransbury as Chief Technology Officer. Terry has 35 years of experience in product development, primarily in class III medical devices, including at Cordis (JNJ), Ventritex (St Jude Medical) and BioSense-Webster (JNJ)
- Appointed Richard Randall and R. John Fletcher as Independent Directors. Rick is an experienced chief executive officer of medical device companies, including Target Therapeutics, Innovasive Devices and Trans 1. John is the founder and managing partner of Fletcher Spaght, a growth focused strategy consulting firm

# Signature Medical, Inc.

Signature Medical, Inc. (Signature) is developing cardiac signature technology on a wearable device enabling diagnosis and monitoring of heart failure during hospital therapy and post discharge. Its lead AcoustiCare<sup>TM</sup> device, which is currently under development, could allow for better intervention and reduced hospital readmissions, improving outcomes for patients and reducing costs to the healthcare system. Co-investors in Signature Medical are Boston based Riot Ventures and Bose Corporation. Key milestones for Signature delivered in the first half of 2018:

- Formed Scientific Advisory Board, including engagement of key opinion leader and heart failure experts from leading institutions
- Advanced the development of AcoustiCare<sup>™</sup> sensor wearable monitor prototype
- Developed clinical and regulatory strategies and path for the AcoustiCare™ system
- Initiated human data collection process to demonstrate signal detection and to support algorithm development
- Filed IP for AcoustiCare<sup>™</sup> sensor and proprietary algorithm.

# Corporate Partnerships

# Allied-Bristol Life Sciences, LLC

The Board of Allied Minds has determined to cease additional funding to Allied-Bristol Life Sciences (ABLS) and seek strategic alternatives, which may include a sale of our investment or orderly exit from this drug discovery and development company created in August 2014 through a partnership between Allied Minds and Bristol-Myers Squibb (BMS). Although the ABLS model provided a thoughtful route to engaging in drug discovery while mitigating some of the risk inherent in this activity, the Board determined that capital assigned or committed to ABLS should be reallocated to more promising use cases that are better aligned with our current investment theses where we believe we can bring significant competitive advantage.

# **General Electric**

In September 2016, Allied Minds and GE Ventures announced the launch of a strategic alliance to jointly identify and invest in new and existing technologies developed from both innovation pipelines. Allied Minds and GE Ventures' continued to explore commercialisation candidates in the first half of the year. However, no joint investments were agreed, and the agreement with GE expired by its own terms in September 2018.

# Summary of 2018 MBOs

Subsidiary	2018 Key Operational Management Objectives
BridgeSat	<ul> <li>Successfully demonstrate end-to-end service: Network Operations Centre (NOC), at least one ground station, and customer pathfinder(s)</li> <li>Sign 2+ customer agreements; build strong commercial revenue backlog</li> <li>Acquire launch customers</li> </ul>
Federated Wireless	<ul> <li>FCC certification</li> <li>Support multiple customer launches and realise commercial revenue</li> <li>Commence build out national availability of ESC network to meet customer requirements</li> </ul>
HawkEye <sup>360</sup>	<ul> <li>Successfully launch Pathfinder satellite cluster</li> <li>Launch Marine Domain Awareness (MDA) products and realise commercial revenue</li> </ul>
Precision Biopsy	<ul><li>Gain CE Mark</li><li>Complete Cohort B trial</li></ul>
SciFluor	<ul><li>Initiate at least one Phase II trial for SF0166</li><li>Complete in-life IND enabling study for one new asset</li></ul>
Spin Transfer	<ul> <li>Successfully demonstrate the advantages of the Spin Polarizer and Endurance Engine</li> <li>Sign 2+ customer/partner agreements</li> </ul>

Subsidiary	Year Formed <sup>(1)</sup>	Ownership Interest <sup>(2)(3)</sup>	Overview
		Life Science	25
Included in the top six compo	anies		
Precision Biopsy, Inc.	2008	64.84%	Medical device and analytics company using spectral analysis to distinguish tissue characteristics in real-time, with the aim of improving diagnostics and therapies. Initially focused on prostate cancer, the technology is potentially applicable to other cancers
SciFluor Life Sciences, Inc.	2010	70.03%	Drug development company focused on creating a portfolio of best- in- class compounds in the fields of ophthalmology, neuroscience and fibrosis. Lead clinical asset SF0166 is a topical eye droplet treatment for retinal diseases including Wet AMD and DME
Other companies			
LuxCath, LLC	2012	99.29%	Catheter ablation initially focused on atrial fibrillation using novel proprietary real-time tissue and lesion visualisation technology
Signature Medical, Inc.	2017	88.09%	Developing cardiac signature technology on a wearable device enabling diagnosis and monitoring of heart failure during hospital therapy and post discharge
		Technology	/
Included in the top six compo	anies		
BridgeSat, Inc.	2015	81.38%	Developing an optical communications service for data transfer from LEO and Geostationary Equatorial Orbit (GEO) satellites to earth (and vice versa), and between satellites, targeting significantly lower cost and faster rates than current Radio Frequency (RF) solutions
Federated Wireless, Inc.	2012	52.25%	Plans to offer a cloud-based SaaS service that unlocks spectrum previously unavailable to commercial users by enabling government and commercial users to securely share the same spectrum band
HawkEye 360, Inc.	2015	48.35%	Data analytics company seeking to commercialise the capability to detect, independently geo-locate and analyse diverse RF signals from space
Spin Transfer Technologies, Inc.	2007	48.55%	Technology solutions that have the potential to materially enhance the endurance, speed and size characteristics of MRAM (magneto-resistive random access memory) – the emerging next generation memory technology
Other companies			
QuayChain, Inc.	2018	72.22%	Developing CBRS-enabled connected digital infrastructure at multi-user industrial locations such as ports and large industrial real estate complexes, enabling operators and users to secure efficiencies in supply chain management

# Portfolio Companies and Investments of Allied Minds

Orbital Sidekick, Inc.	2016	Significant minority	Developing capabilities in aerial and space-based hyperspectral imaging and analytics, initially for the oil and gas industry
TableUp, Inc.	2013	Significant minority	Software provider enabling end-to-end transparency through the restaurant supply chain to enable more effective inventory and operations management
	C	Corporate Partner	ships
Allied-Bristol Life Sciences, LLC	2014	80.00%	Created with Bristol-Myers Squibb (BMS) to identify and conduct preclinical development of therapeutic candidates which are intended to be sold to BMS prior to clinical development
ABLS Capital, LLC	2016	30.25%	Formed to fund up to 80% of the lead optimisation phase with the remaining up to 20% funded by BMS, of up to ten new drug candidates that pass initial feasibility studies initially funded by ABLS
ABLS II, LLC	2014	35.95%	Novel small molecule therapeutics for the treatment of fibrotic and autoimmune diseases, developed in the Harvard University laboratory of Professor Malcolm Whitman
ABLS IV, LLC,	201 <i>7</i>	80.00%	Novel inhibitors of immunoproteasomes targeting inflammatory and autoimmune diseases, Dr. Gang Lin, an associate professor of research in microbiology and immunology at Weill Cornell Medicine, and Dr. Carl Nathan, dean of Weill Cornell Graduate School of Medical Sciences and chairman of the Department of Microbiology and Immunology at Weill Cornell Medicine

Notes:

(1) Allied Minds' initial investments in TableUp and Orbital Sidekick were completed in 2018, whereas these companies were formed earlier

(2) Ownership interests are as at 25 September 2018 (being the latest practicable date prior to the publication of this document) and are based upon percentage interest of issued and outstanding common shares and preferred shares (on an as-converted into voting common share basis); provided that for ABLS II and ABLS Capital the disclosed percentage represents the Company's direct or indirect economic interest

(3) During the period Allied Minds sold Percipient Networks for an undisclosed cash sum and ceased operations and dissolved each of Whitewood Encryption Systems, Inc. (Whitewood Encryption) and Seamless Devices, Inc. (Seamless Devices)

# Portfolio overview and valuation

Approximately \$405.1 million of capital has been allocated to the Group's active portfolio companies as of the date of this report, of which \$170.5 million was raised and deployed by Allied Minds, \$228.3 million has been contributed by third party investors directly into the subsidiary companies and \$6.3 million has been raised in the form of loans from banks and federal grants.

The Group portfolio companies include subsidiary companies that are currently controlled and therefore fully consolidated in the Company's consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS) and those portfolio companies in which the Group has a minority holding (investments at fair value). As a result, the Consolidated Statements of Financial Position incorporated within the Company's consolidated financial statements do not include current valuations of the Company's subsidiary companies and only reflect the carrying value of the investments at fair value.

At the close of each financial reporting period, the Directors approve the total value of all portfolio companies in the Group, which is used to derive the Group "Ownership Adjusted Value" (OAV). The group Ownership Adjusted Value was estimated at \$350.1 million as at 27 September 2018, compared to \$395.6 million as last reported. The decrease is mainly attributable to the reductions in the OAV for SciFluor, Precision Biopsy and Spin Transfer. The reduction of the discounted cash flow (DCF) valuation for SciFluor was due to adverse impacts in the company's clinical and regulatory plans as a result of delays in planned financing activities during 2018. The reduction of the DCF valuation for Precision Biopsy was due to the delay in the Cohort B pivotal trial now expected to begin in the first half of 2019. The reduction in the OAV for Spin Transfer was due to the anticipated valuation at which the company will finance in Q4 2018 pursuant to a signed conditional term sheet.

This reduction was offset in part by increases in OAV at both HawkEye<sup>360</sup> and BridgeSat due to financing rounds at each that closed in Q3 2018 and also from the new investments during the first half of 2018, Orbital Sidekick and TableUp.

There can be no guarantee that the aforementioned valuation of the Group will be considered to be correct in light of the future performance of the various Group businesses, or that the Group would be able to realise proceeds in the amount of such valuations, or at all, in the event of a sale of any of its subsidiaries.

# **Risk management**

The principal risks and uncertainties surrounding the Group businesses are set out in detail on pages 36 to 43 in the Risk Management section of the Strategic Report included in the 2017 Annual Report and Accounts. Such risks and uncertainties include those in connection with science and technology development or commercialisation failures; lack of profitability; break down, termination or expiration of relationships with US universities and federal government institutions; inherent limitations on exclusive licenses with US universities and other federally-funded research institutions; regulatory restrictions and limitations; key senior management risk; termination of critical IP licenses; significant delays or failure to complete clinical studies; and lack of capital; all as further described in the 2017 Annual Report and Accounts.

There have not been any significant changes in the nature of the risks set forth therein that will affect the next six months of the financial year, therefore, such risks are applicable to the remaining six months of the financial year. A copy of the 2017 Annual Report and Accounts is available on the Company's website at www.alliedminds. com under "Investors – Reports & Presentations".

# Financial review

# Condensed Consolidated Statement of Comprehensive Income

For the six months ended:	30 June 2018 \$'000	30 June 2017 \$'000
Revenue	2,062	1,977
Cost of revenue	(1,184)	(3,703)
Selling, general and administrative expenses	(23,030)	(31,205)
Research and development expenses	(22,970)	(25,296)
Finance income, net	49,376	23
Income/(loss) for the year	4,254	(58,204)
Other comprehensive loss, net of tax	(89)	(103)
Total comprehensive income/(loss)	4,165	(58,307)

Revenue increased by \$0.1 million, to \$2.1 million for the six months ended 30 June 2018 (HY17: \$2.0 million), when compared to the same period in the prior year. This increase is primarily attributable to revenue from new contracts in 2018 at Federated Wireless of \$1.0 million, offset in part by lower revenue at HawkEye<sup>360</sup> of \$0.3 million and at discontinued companies of \$0.6 million. Cost of revenue at \$1.2 million for the six months ended 30 June 2018 (HY17: \$3.7 million) was lower as a percentage of revenue, when compared to the same period in the prior year, mainly due to inventory write-offs at discontinued companies in the first half of 2017.

Selling, general and administrative (SG&A) expenses decreased by \$8.2 million, to \$23.0 million for the six months ended 30 June 2018 (HY17: \$31.2 million). This reduction was mainly due to the restructuring charge for discontinued subsidiaries in the first half of 2017. Total SG&A was offset, in part, by the net gain from the disposal of assets at Percipient Networks in the first half of 2018.

Research and development (R&D) expenses decreased by \$2.3 million, to \$23.0 million for the six months ended 30 June 2018 (HY17: \$25.3 million). The decrease was primarily due to \$2.0 million of expense incurred by discontinued subsidiaries in 2017. The remainder of the decrease reflects the net effect from R&D spend at the other subsidiaries.

Net finance income increased by \$49.4 million for the six months ended 30 June 2018 to \$49.4 million (HY17: \$23 thousand). The increase reflects finance income of \$48.5 million from IFRS 9 fair value accounting of the subsidiary preferred shares liability balance (HY17: cost of \$0.2 million). The change was primarily from adjustments at Spin Transfer, SciFluor and Precision Biopsy.

As a result of the above discussed factors, total comprehensive income for the year increased by \$62.5 million to \$4.2 million for the six months ended 30 June 2018 (HY17: loss of \$58.3 million).

# Condensed Consolidated Statement of Financial Position

As of the period ended:	30 June 2018 \$'000	31 December 2017 \$'000
Non-current assets	33,964	28,369
Current assets	147,122	184,792
Total assets	181,086	213,161
Non-current liabilities	565	867
Current liabilities	157,152	200,202
Equity	23,369	12,092
Total liabilities and equity	181,086	213,161

Significant performance-impacting events and business developments reflected in the Group's financial position at the half year end include:

Non-current assets increased by \$5.6 million, to \$34.0 million at 30 June 2018 (FY17: \$28.4 million), mainly due to a \$7.5 million investment in portfolio companies at fair value, offset in part by the decrease in property and equipment.

- o Investments at fair value increased to \$7.5 million as of 30 June 2018 (FY17: nil), reflecting the investments in Orbital Sidekick and TableUp.
- Property and equipment decreased by \$1.6 million to \$25.0 million as of 30 June 2018 (FY17: \$26.6 million), mainly reflecting depreciation of \$2.9 million offset by additions of \$1.3 million.
- o Intangible assets decreased by \$0.3 million to \$0.8 million at 30 June 2018 (FY17: \$1.1 million) as a result of impairment and amortisation of \$0.5 million offset by additions of \$0.2 million.

Current assets decreased by \$37.7 million, to \$147.1 million as of 30 June 2018 (FY17: \$184.8 million), mainly due to a reduction in cash and cash equivalents and short-term investments of \$37.0 million.

- Cash and cash equivalents decreased by \$25.9 million to \$132.2 million at 30 June 2018 from \$158.1 million at 31 December 2017 due to operating cash outflows of \$39.7 million, investment at fair value of \$7.5 million and acquisition of property and equipment and intangibles of \$1.6 million. This decrease was offset by the maturity of \$11.1 million of the investments in fixed income securities, proceeds from the bridge financing at Spin Transfer of \$10.3 million, and \$1.6 million from exercises of stock options in the first half of 2018.
- o Trade and other receivables decreased by \$1.0 million due to a decrease in trade receivables of \$2.7 million from customer collections mainly at HawkEye<sup>360</sup>. This decrease is offset in part by an increase in prepaid expenses of \$1.7 million as a result of advanced payments made by HawkEye<sup>360</sup> for the design and construction of the pathfinder and by BridgeSat towards the construction of its ground station.
- Other current investments decreased by \$11.1 million to nil (FY17: \$11.1 million) due to their maturity into cash equivalents.

Non-current liabilities decreased by \$0.3 million, to \$0.6 million as of 30 June 2018 (FY17: \$0.9 million) reflecting a reduction in the deferred rent balance at 30 June 2018.

Current liabilities decreased by \$43.0 million, to \$157.2 million at 30 June 2018 (FY17: \$200.2 million) mainly reflecting a net decrease of \$38.2 million in subsidiary preferred shares liability and a decrease in trade and other payables by \$5.0 million. The decrease in subsidiary preferred shares liability reflects the fair value adjustment for the period of \$48.5 million offset by the bridge financing at Spin Transfer of \$10.3 million. The overall decrease in current liabilities was offset in part by the increase in deferred revenue of \$0.2 million.

Net equity increased by \$11.3 million to \$23.4 million at 30 June 2018 (FY17: \$12.1 million) reflecting the combination of comprehensive income for the period of \$4.2 million, proceeds from the exercise of options in Allied Minds of \$1.6 million and a \$5.5 million charge due to equity-settled share based payments.

# Condensed Consolidated Statement of Cash Flows

For the six months ended:	30 June 2018 \$'000	30 June 2017 \$'000
Net cash outflow from operating activities	(39,739)	(52,993)
Net cash inflow from investing activities	1,970	8,773
Net cash inflow from financing activities	11,849	4,440
Net decrease in cash and cash equivalents	(25,920)	(39,780)
Cash and cash equivalents at beginning of period	158,075	209,151
Cash and cash equivalents at end of the period	132,155	169,371

The Group's net cash outflow from operating activities of \$39.7 million in the six months ended 30 June 2018 (HY17: \$53.0 million) was primarily due to the net operating losses for the period of \$45.1 million (HY17: \$58.3 million) and an increase in working capital and other finance costs of \$3.5 million (HY17: \$2.9 million). The operating cash outflow was offset by adjustments for non-cash accounting entries such as depreciation, amortisation, and share-based expenses of \$8.9 million (HY17: \$8.2 million).

The Group had a net cash inflow from investing activities of \$2.0 million in the six months ended 30 June 2018 (HY17: \$8.8 million). This inflow predominately reflected the maturity of fixed income securities totalling \$11.1 million (HY17: \$9.3 million) offset in part by the investments at fair value of \$7.5 million (HY17: nil) and purchases of property and equipment and intangibles of \$1.6 million (HY17: \$0.5m).

The Group's net cash inflow from financing activities of \$11.9 million in the six months ended 30 June 2018 (HY17: \$4.4 million) reflects, in part, the net proceeds of \$10.3 million from the bridge financing at Spin Transfer in the first half of 2018. Additionally, cash inflows from financing activities in the period included proceeds of \$1.6 million from exercises of stock options and issuance of share capital at Allied Minds.

Total cash and deposits, including the investments in fixed income securities, reflects the available funds to the Group for future investment, which decreased to \$132.2 million at 30 June 2018 from \$169.1 million at 31 December 2017. Cash and deposits held at the parent level were \$66.0 million at 30 June 2018 down from \$84.2 million at 31 December 2017.

The Group's strategy is to maintain healthy, highly liquid cash balances that are readily available to support the activities of its subsidiaries in terms of working capital, maintaining the level of research and development activities required to achieve the set milestone goals, and acquiring capital equipment where necessary to support those research and development activities. To further minimise its exposure to risks, the Group does not maintain any material borrowings or cash balances in currencies other than U.S. dollars.

# CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the six months ended:	Note	30 June 2018 \$'000	30 June 2017 \$'000
Revenue		2,062	1,977
Operating expenses:			
Cost of revenue		(1,184)	(3,703)
Selling, general and administrative expenses		(23,030)	(31,205)
Research and development expenses		(22,970)	(25,296)
Operating loss	-	(45,122)	(58,227)
Finance income		908	213
Finance cost		(48)	(13)
Finance income/(cost) from IFRS 9 fair value accounting	7	48,516	(177)
Finance income, net	-	49,376	23
Income/(loss) before tax	-	4,254	(58,204)
Taxation		_	-
Income/(loss) for the period	2	4,254	(58,204)
Other comprehensive income/(loss):			
Items that may be reclassified subsequently to profit or loss:			
Foreign currency translation differences		(89)	(103)
Other comprehensive loss, net of taxation	-	(89)	(103)
Total comprehensive income/(loss)	=	4,165	(58,307)
Income/(loss) attributable to:			
Equity holders of the parent		(12,538)	(44,645)
Non-controlling interests	6	16,792	(13,559)
Ŭ	=	4,254	(58,204)
Total comprehensive income/(loss) attributable to:			
Equity holders of the parent		(12,627)	(44,748)
Non-controlling interests		16,792	(13,559)
	=	4,165	(58,307)
Loss per share		\$	\$
Basic	4	(0.05)	(0.19)
Diluted	4	(0.05)	(0.19)
	-	11	1

# CONDENSED CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As of the period ended:	Note	30 June 2018 \$'000	31 December 2017 \$'000
Non-current assets			
Property and equipment		25,048	26,627
Intangible assets		816	1,074
Investments at fair value	3	7,500	_
Other financial assets		600	668
Total non-current assets	_	33,964	28,369
Current assets	_		
Cash and cash equivalents		132,155	158,075
Other investments		_	11,057
Trade and other receivables		14,565	15,642
Other financial assets		402	18
Total current assets	_	147,122	184,792
Total assets	=	181,086	213,161
Equity			
Share capital		3,743	3,714
Share premium		160,170	158,606
Merger reserve		263,367	263,367
Translation reserve		—	89
Accumulated deficit		(363,338)	(354,443)
Equity attributable to owners of the Company	5	63,942	71,333
Non-controlling interests	6	(40,573)	(59,241)
Total equity	_	23,369	12,092
Non-current liabilities	_		
Other non-current liabilities		565	867
Total non-current liabilities	_	565	867
Current liabilities			
Trade and other payables		9,326	14,276
Deferred revenue		4,456	4,296
Subsidiary preferred shares	7	143,370	181,630
Total current liabilities	_	157,152	200,202
Total liabilities	_	157,717	201,069
Total equity and liabilities	_	181,086	213,161

	ר	Share Capital	oital				_	- - H	-	
	Note	Shares	Amount \$'000	Share premium \$'000	Merger reserve \$'000	Translation reserve \$'000	Accumulated deficit \$'000	Total parent equity \$'000	Non- controlling interests \$'000	Total equity \$'000
Balance at 31 December 2016		233,744,378	3,657	157,067	263,435	192	(289,437)	134,914	(20,797)	114,117
Total comprehensive loss for the period										
Loss from continuing operations		I	Ι	Ι	Ι	Ι	(44,645)	(44,645)	(13,559)	(58,204)
Foreign currency translation		l	I	I		(103)		(103)		(103)
Total comprehensive loss for the period						(103)	(44,645)	(44,748)	(13,559)	(58,307)
lssuance of ordinary shares	\$	3,292,645	42	I	(68)	I		(26)	l	(26)
Gain/(loss) arising from change in non-controlling interest	9		I	I	I	I	(84)	(84)	84	I
Exercise of stock options	5,8	501,866	9	931		I		937	I	937
Equity-settled share based payments	00		Ι	Ι	Ι	Ι	1,863	1,863	959	2,822
Balance at 30 June 2017		237,538,889	3,705	157,998	263,367	89	(332,303)	92,856	(33,313)	59,543
Balance at 31 December 2016		233,744,378	3,657	157,067	263,435	192	(289,437)	134,914	(20,797)	114,117
Total comprehensive loss for the period										
Loss from continuing operations		I	I	I		Ι	(75,675)	(75,675)	(35,337)	(111,012)
Foreign currency translation			I	I		(103)		(103)	I	(103)
Total comprehensive loss for the period						(103)	(75,675)	(75,778)	(35,337)	(111,115)
Issuance of ordinary shares	9	3,402,567	43	I	(68)	I		(25)	I	(25)
Gain/(loss) arising from change in non-controlling interest	9		Ι	Ι	Ι	Ι	(50)	(50)	50	Ι
Dissolution of subsidiaries							4,653	4,653	(4,653)	I
Exercise of stock options	5,8	1,055,596	14	1,539	I	I		1,553	I	1,553
Equity-settled share based payments	00	I	I	I	I	I	6,066	6,066	1,496	7,562
Balance at 31 December 2017		238,202,541	3,714	158,606	263,367	89	(354,443)	71,333	(59,241)	12,092
Total comprehensive income/(loss) for the period										
Income/(loss) from continuing operations		I	Ι	Ι	Ι	Ι	(12,538)	(12,538)	16,792	4,254
Foreign currency translation			I	I		(89)		(89)	I	(89)
Total comprehensive income/(loss) for the period					•	(8)	(12,538)	(12,627)	16,792	4,165
lssuance of ordinary shares	\$	1,224,831	17	I	I	I		17	I	17
Gain/(loss) arising from change in non-controlling interest	\$	I	I	I	I	I	(280)	(280)	280	I
Exercise of stock options	5,8	887,373	12	1,564	I	I		1,576	I	1,576
Equity-settled share based payments	ω		I	I	I	I	3,923	3,923	1,596	5,519
Balance at 30 June 2018		240,314,745	3,743	160,170	263,367	T	(363,338)	63,942	(40,573)	23,369

# CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Condensed Consolidated Interim Financial Statements

### Half-Yearly Report for the six months ended 30 June 2018

# CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

For the six months ended:	Note	30 June 2018 \$'000	30 June 2017 \$'000
Cash flows from operating activities:			
Net operating loss		(45,122)	(58,227
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation		2,931	2,877
Amortisation		38	229
Impairment losses on property and equipment		_	625
Impairment losses on intangible assets		455	1,570
Share-based compensation expense	8	5,519	2,822
Changes in working capital:			
Decrease in inventory		_	2,530
Decrease/(increase) in trade and other receivables		1,077	(3,393
(Increase)/decrease in other assets		(316)	295
Decrease in trade and other payables		(4,950)	(3,300
(Decrease)/increase in other non-current liabilities		(302)	684
Increase in deferred revenue		160	200
Interest received		904	201
Interest paid		_	(3
Other finance cost		(133)	(103
Net cash used in operating activities	_	(39,739)	(52,993)
Cash flows from investing activities:			
Purchases of property and equipment, net of disposals		(1,352)	(531)
Purchases of intangible assets, net of disposals		(235)	(17
Purchases of investments at fair value	3	(7,500)	_
Disposal of other investments		11,057	9,321
Net cash provided by investing activities	_	1,970	8,773
Cash flows from financing activities:			
Proceeds from exercise of stock options	5	1,576	937
Borrowings of notes payable		_	2,000
Repayment of notes payable		_	(114
Proceeds from issuance of share capital		17	42
Proceeds from issuance of preferred shares in subsidiaries	7	10,256	1,575
Net cash provided by financing activities	_	11,849	4,440
Net decrease in cash and cash equivalents		(25,920)	(39,780
Cash and cash equivalents at beginning of period		158,075	209,151
Cash and cash equivalents at end of period	_	132,155	169,371

# NOTES TO THE CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS

# 1. General information

# a) Reporting entity

Allied Minds Group comprises of Allied Minds plc and its subsidiaries ("Allied Minds", the "Group" or the "Company"). The Company is publicly listed on the Main Market of the London Stock Exchange ("LSE"). Allied Minds plc is engaged in the development of various technologies for commercial applications. As of 30 June 2018, Allied Minds Group comprised of 21 legal subsidiaries, which included 12 active portfolio companies. Additionally, the Group invested in 2 portfolio companies, accounted for as investments at fair value, in which the Company holds a minority ownership position. The portfolio companies have entered into agreements with universities, scientists, and U.S. federal research institutions to develop and commercialise products. In exchange for licenses, time, and expertise already provided, certain universities and/or scientists received an equity ownership in such companies. The cash contributed by Allied Minds is used to fund additional research and to create a management structure and operations.

# b) Basis of preparation

These interim financial statements have been prepared in accordance with International Accounting Standard ("IAS") 34 Interim Financial Reporting and should be read in conjunction with the Group's last financial statements as at and for the year ended 31 December 2017. They do not include all the information required for a complete set of IFRS financial statements. However, selected explanatory notes are included to explain events and transactions that are significant to an understanding of the changes in the Group's financial position and performance since the last annual consolidated financial information included in the annual report and accounts as at and for the year ended 31 December 2017.

Subsidiaries are fully consolidated from the date of acquisition, being the date on which the Group obtains control and continue to be consolidated until the date when such control ceases. The financial information of the subsidiaries is prepared for the same reporting period as the parent Company, using consistent accounting policies. All intra-group balances, transactions, unrealised gains and losses resulting from intra-group transactions and dividends are eliminated in full.

Investments in associates are carried at cost less impairment unless it is demonstrated that the group exercises significant influence over the entity and then it is equity accounted.

Non-controlling interests ("NCI") are measured at their proportionate share of the acquiree's identifiable net assets at the acquisition date. Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

The financial information presented in these half-yearly results has been prepared under the historical cost convention. The reporting currency adopted by Allied Minds is U.S. dollar ('\$') as this is the functional currency of the entities in the Group. In preparing these interim financial statements, management has made judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, income and expense. Actual results may differ from these estimates.

The significant judgements made by management in applying the Group's accounting policies and the key sources of estimation uncertainty were the same as those that applied to the consolidated financial information included in the Group annual report and accounts as at and for the year ended 31 December 2017.

The Directors have prepared trading and cash flow forecasts for the Group covering the period to 31 December 2020. The forecast is built on the assumption that further external funding is provided to the Group either in the form of proceeds from subsidiary exit events or further parent company fundraises. In the event that further external funding is not obtained, the Directors have mitigating actions available such as lowering the deployment of capital. The Directors believe that the assessment period through 31 December 2020 is most appropriate as it aligns with the Group's normal and well-established budgeting process. Despite the fact that the Group is currently loss making and is likely to continue to be so, at least in the short term, after making enquiries and considering the impact of risks and opportunities on expected cash flows, and given the fact that the Group has \$132.2 million of available funds in the form of cash and cash equivalents as at 30 June 2018, the Directors have a reasonable expectation that the Group has adequate cash to continue in operational existence for the foreseeable future. For this reason, they have adopted the going concern basis in preparing these half-yearly results.

The financial information contained in this half-yearly report does not constitute full statutory accounts as defined in section 434 of the Companies Act 2006. The condensed consolidated financial statements are neither audited nor reviewed and the results for the six months ended 30 June 2018 are not necessarily indicative of results for future operating periods.

Certain financial information has been extracted from the annual report and accounts as at and for the period ended 31 December 2017 and has been included for comparative purposes in this half-yearly report.

These interim financial statements are unaudited and were approved by the Board of Directors and authorised for issue on 27 September 2018 and are available on the Company's website at www.alliedminds.com under "Investors – Reports and Presentations".

# c) Accounting policies

Except as described below, the accounting policies applied by the Group in these half-yearly results are the same as those which formed the basis of the 2017 Annual Report and Accounts. No new standards that have become effective in the period have had a material effect on the Group's financial statements.

The changes in accounting policies are also expected to be reflected in the Group's consolidated financial statements as of and for the year ending 31 December 2018.

### Newly adopted standards

The Group has initially adopted IFRS 15 *Revenue from Contracts with Customers* and IFRS 9 *Financials Instruments* from 1 January 2018. Other new standards are effective from 1 January 2018, although it was determined that these do not have a material impact on the Group's financial statements.

The initial application of the two standards with regards to recognition and measurement does not have a material impact on the results of the Group and therefore no restatement has been made to the financials. The Group arrived at this conclusion for each of the accounting standard based on the following assessment:

# IFRS 15, 'Revenue from Contracts with Customers'

IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It replaces existing revenue recognition guidance, including IAS 18 Revenue, IAS 11 Construction Contracts and IFRIC 13 Customer Loyalty Programs.

While IAS 18 states that the revenue recognition criteria depends on each type of revenue, IFRS 15 implements a uniform method of recognising revenue based on the actual contract and performance obligation. Under

IFRS 15, revenue will be recognised when the Company satisfies a performance obligation by transferring a promised good or service to its customer. As such, based on the application of the new standard, the amount of revenue recognised is the amount allocated to the satisfied performance obligation. A performance obligation may be satisfied at a point in time (typically for promises to transfer goods to a customer) or over time (typically for promises to transfer services to a customer).

Determining the timing of the transfer of control – at a point in time or over time – requires judgement. This was the key point that was considered by the Group on transition of this accounting standard. Based on Group's assessment, it was concluded that the majority of the Company's projects that:

- *Render a service* are performed on a time and materials basis and revenue will be recognised as services are provided based on actual hours worked for a set period. The performance obligations identified within these projects are distinct and meet the criteria resulting in transfer of control over time. Since the fair value and the stand-alone selling prices of the services are broadly similar, the Group concluded that the application of IFRS 15 does not result in significant differences in the timing of revenue recognition for these services.
- *Sell goods,* revenue is recognised when the control of the products were transferred to the customer. The performance obligations identified within these projects are distinct and meet the criteria resulting in transfer of control at a point in time. No significant accounting differences noted between IAS 18 and IFRS 15 in the timing of revenue recognition for the sale of these products.

The Group has adopted IFRS 15 on a cumulative catch-up basis, with the effect of initially applying this standard recognised at the date of initial application (i.e. 1 January 2018). Based on the Group's assessment, it was determined the application of IFRS 15 results in no significant differences in the timing of revenue recognition and it did not have a significant impact on the Group's accounting policies. As a result, the comparative information provided continues to be accounted for in accordance with the Group's previous accounting policy as disclosed in the financial statements for the year ended 31 December 2017.

### IFRS 9, 'Financial Instruments'

IFRS 9 sets out requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard replaces IAS 39 *Financial Instruments: Recognition and Measurement.* 

At the reporting date, the only complex financial instruments that the Group holds are subsidiary preferred shares liabilities. There is no effect on these financial instruments on the transition to the new accounting standard with it continuing to be measured at fair value through profit or loss and hence no restatement is required.

The application of the IFRS 9 'expected credit loss' model does not have a material impact on the level of impairment of receivables.

# Classification – Financial Assets

IFRS 9 contains a new classification and measurement approach for financial assets that reflects the business model, in which assets are managed, and their cash flow characteristics. IFRS 9 contains three principal classification categories for financial assets: measured at amortised cost, fair value through other comprehensive income ("FVOCI") and fair value through profit or loss ("FVTPL"). The standard eliminates the existing IAS 39 categories of held to maturity, loans and receivables, and available for sale. Under IFRS 9, derivatives embedded in contracts where the host is a financial asset in the scope of the standard are never bifurcated. Instead, the hybrid as a whole is assessed for classification.

*Cash and cash equivalents*: Represent basic cash balances in banks used to fund operations. These are classified as assets at amortised cost under the new standard;

*Trade Receivables*: Under IFRS 9 trade receivables that do not have a significant financing component have to be initially recognised at their transaction price rather than at fair value. The Group initially recognises receivables and deposits on the date that they are originated at their transaction price, which is the same as their fair value. As such, Trade and other receivables are now classified as assets at amortised cost under IFRS 9.

Security and other deposits: These generally represent security deposits paid by the Group to landlords as part of operating lease commitments. As the Company's objective is that those deposits will be collected back, they are now classified as assets at amortised cost under IFRS 9.

Investments in subsidiaries: Currently, all group subsidiaries are fully consolidated in the consolidated financial statements. The value of those companies, plus the value of investments at fair value, is disclosed as an alternative performance measure, which was determined at \$350.1 million as of 27 September 2018. In the future, the Company's position in those investments may be reduced to a point where the Company no longer exercises control over these entities and they are deconsolidated from the group accounts and presented separately either as investments in equity securities or investments at fair value on the consolidated statement of financial position.

Investments at fair value: Reflect investments made by the Group in non-derivative instruments of the investees that are designated in this category or not classified in any other category. These financial assets are initially measured at fair value and subsequently re-measured at fair value at each reporting date. The Company elects if the gain or loss will be recognised in the Consolidated Statements of Comprehensive Income/ (Loss) in Other Comprehensive Income/(Loss) or through the profit and loss on an instrument by instrument basis. Investments at fair value are presented in the Consolidated Statements of Financial Position as non-current assets, unless the Group intends to dispose of them within 12 months after the end of the reporting period. If the investments at fair value continue to be held for the same long-term strategic purposes, per the application of IFRS 9, the Group may elect then to classify them as FVOCI or FVTPL. The Group has not yet made a decision in this regard. In the former case, all fair value gains and losses would be reported in other comprehensive income, no impairment losses would be recognised in profit or loss and no gains or losses would be reclassified to profit or loss on disposal. In the latter case, all fair value gains and losses would be recognised in profit or loss as they arise, increasing volatility in the Group's profits.

The Group's preliminary assessment does not indicate any material impact from IFRS 9 on the Group's financial position as of 1 January 2018.

# Classification – Financial Liabilities

Under IAS 39 all fair value changes of liabilities designated as at fair value through profit or loss are recognised in profit or loss, whereas under IFRS 9 these fair value changes are generally presented as follows:

- the amount of change in the fair value that is attributable to changes in the credit risk of the liability is presented in OCI; and
- the remaining amount of change in the fair value is presented in profit or loss.

The Group has designated the subsidiary preferred shares liability at FVTPL and the trade and other payables and loans at amortised cost under IFRS 9. The Group's assessment did not indicate any material impact of IFRS 9's requirements regarding the classification of financial liabilities were applied at 30 June 2018.

### Impairment

IFRS 9 replaces the 'incurred loss' model in IAS 39 with a 'forward looking expected credit loss' ("ECL") model. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables, the group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

### Standards issued not yet effective

# IFRS 16, 'Leases'

IFRS 16 replaces existing leases guidance, including IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a lease, SIC -15 Operating Leases – Incentives and SIC-27 Evaluating the substance of transactions involving the legal form of a lease. IFRS 16 introduces a single, on-balance sheet lease accounting model for lessees in a similar way to finance leases under IAS 17. A lessee recognises a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are recognition exemptions for short-term leases and leases of low-value items. Lessor accounting remains similar to the current standard, i.e. lessors continue to classify leases as finance or operating leases.

The Group has completed an initial assessment of the potential impact on its consolidated financial statements but has not yet completed its detailed assessment. So far, the most significant impact identified is that the Group will recognise new assets and liabilities for its operating leases of its rented office and laboratory space. In addition, the nature of expenses related to those leases will now change because IFRS 16 replaces the straight-line operating lease expense with a depreciation charge for right-of-use assets and interest expense on lease liabilities.

As at 1 January 2018, the Group's future minimum lease payments under non-cancellable operating leases amounted to \$8.0 million, on an undiscounted basis. The Group plans to apply IFRS 16 initially on 1 January 2019, using the modified retrospective approach. Therefore, the cumulative effect of adopting IFRS 16 will be recognised as an adjustment to the opening balance of retained earnings at 1 January 2019, with no restatement of comparative information.

# 2. Operating segments

### a) Basis for segmentation

For management purposes, the Group's principal operations are currently organised in three reportable segments:

- i. Early stage reflects the activity of subsidiary businesses that are in the early stage of their lifecycle characterised by incubation, research and development activities.
- ii. Later stage reflects the activity of subsidiary businesses that have substantially advanced with or completed their research and development activities, are closer in their lifecycle to commercialisation, and/or have a potential of realising material return on investment through a future liquidity event.
- iii. Minority holdings reflects the activity related to portfolio companies other than consolidated subsidiary businesses where the Group has made a minority investment and does not control or exercise joint control over the financial and operating policies of those entities.

In April 2018, Allied Minds invested in two portfolio companies – Orbital Sidekick and TableUp. In both cases, as a result of the transaction, Allied Minds is able to exercise significant influence over these entities by virtue of its large, albeit minority stake in them and its representation on their board of directors. As such, as of the period end 30 June 2018, Allied Minds has decided that it is appropriate to add a new operating segment for the activity related to those two companies and for other companies in which Allied Minds may lose its controlling powers and become a minority investor. The new segment will be called Minority holdings.

The Group's chief operating decision maker ("CODM") reviews internal management reports on these operating segments at least quarterly in order to make decisions about resources to be allocated to the segment and to assess its performance.

Other operations include the management function of the head office at the parent level of Allied Minds.

# b) Information about reportable segments

For the six months ended:

The following provides detailed information of the Group's reportable segments:

30 June 2018 \$000			
Early stage	Later stage	Other operations	Consolidated
250	1,812	—	2,062
(4)	(1,180)	—	(1,184)
2,466	(13,996)	(11,500)	(23,030)
(2,491)	(20,479)	_	(22,970)
111	48,893	372	49,376
332	15,050	(11,128)	4,254
	_	(89)	(89)
332	15,050	(11,217)	4,165
804	(2,214)	(11,217)	(12,627)
(472)	17,264	_	16,792
332	15,050	(11,217)	4,165
	250 (4) 2,466 (2,491) 111 332 - 332 804 (472)	Early stage       Later stage         250       1,812         (4)       (1,180)         2,466       (13,996)         (2,491)       (20,479)         111       48,893         332       15,050         -       -         332       15,050         804       (2,214)         (472)       17,264	\$000         Other operations           Early stage         Later stage         Operations           250         1,812         -           (4)         (1,180)         -           2,466         (13,996)         (11,500)           (2,491)         (20,479)         -           111         48,893         372           332         15,050         (11,128)           -         -         (89)           332         15,050         (11,217)           804         (2,214)         (11,217)           (472)         17,264         -

30	June	2017
	\$00	0

	Early stage	Later stage	Other operations	Consolidated
Statement of Comprehensive Loss				
Revenue	879	1,098	_	1,977
Cost of revenue	(3,236)	(467)	_	(3,703)
Selling, general and administrative expenses	(9,470)	(10,558)	(11,177)	(31,205)
Research and development expenses	(4,383)	(20,913)	_	(25,296)
Finance income/(cost), net	16	(161)	168	23
Loss for the period	(16,194)	(31,001)	(11,009)	(58,204)
Other comprehensive income	13	_	(116)	(103)
Total comprehensive loss	(16,181)	(31,001)	(11,125)	(58,307)
Total comprehensive loss attributable to:				
Equity holders of the parent	(11,756)	(21,867)	(11,125)	(44,748)
Non-controlling interests	(4,425)	(9,134)	_	(13,559)
Total comprehensive loss	(16,181)	(31,001)	(11,125)	(58,307)

As of the period ended:			30 June 2018 \$000		
	Early stage	Later stage	Minority holdings	Other operations	Consolidated
Statement of Financial Position					
Non-current assets	196	25,350	7,500	918	33,964
Current assets	25,574	55,060		66,488	147,122
Total assets	25,770	80,410	7,500	67,406	181,086
Non-current liabilities	(3)	(125)	_	(437)	(565)
Current liabilities	(1,882)	(152,561)	_	(2,709)	(157,152)
Total liabilities	(1,885)	(152,686)		(3,146)	(157,717)
Net assets/(liabilities)	23,885	(72,276)	7,500	64,260	23,369

As of the period ended:		31	December 2017 \$000		
	Early stage	Later stage	Minority holdings	Other operations	Consolidated
Statement of Financial Position					
Non-current assets	452	26,834	_	1,083	28,369
Current assets	22,297	77,849	_	84,646	184,792
Total assets	22,749	104,683	_	85,729	213,161
Non-current liabilities	(3)	(109)	_	(755)	(867)
Current liabilities	(2,237)	(193,523)	_	(4,442)	(200,202)
Total liabilities	(2,240)	(193,632)	_	(5,197)	(201,069)
Net assets/(liabilities)	20,509	(88,949)	_	80,532	12,092

# c) Portfolio valuation

At the close of each financial reporting period, the Directors approve the total value of all portfolio companies in the Group, including group subsidiaries (consolidated entities) and those portfolio companies in which the Group has a minority holding (investments at fair value). This value is used to derive the group "Ownership Adjusted Value" ("OAV"). The OAV is an alternative performance measure ("APM") used by the Directors as a key performance indicator ("KPI") to measure the performance of the Group. An APM is a numeric measure of the Group's financial position that is not a GAAP measure.

The OAV composition at 27 September 2018 includes the current value of group subsidiaries previously disclosed as Group Subsidiary Ownership Adjusted Value ("GSOAV") plus the value of the new portfolio companies in which the Allied Minds took a minority interest during the first half of 2018, i.e. Orbital Sidekick and TableUp. Ownership Adjusted Value represents Allied Minds' interest in the equity value of each portfolio company. This group Ownership Adjusted Value is a sum-of-the-parts ("SOTP") valuation of all the portfolio companies in which the Group interest in.

Whilst the Board considers the methodologies and assumptions adopted in these valuations to be supportable, reasonable and robust, because of the inherent uncertainty of valuation, those estimated values may differ significantly from the values that would have been used had a ready market for the investment existed and the differences could be significant.

The group Ownership Adjusted Value was estimated at \$350.1 million as at 27 September 2018, compared to \$395.6 million as last reported. The decrease is mainly attributable to the reductions in the OAV for SciFluor, Precision Biopsy and Spin Transfer. The reduction of the DCF valuation for both SciFluor was due to adverse impacts in the company's clinical and regulatory plans as a result of delays in planned financing activities during 2018. The reduction of the DCF valuation for Precision Biopsy was due to the delay in the Cohort B pivotal trial now expected to begin in the first half of 2019. The reduction in the OAV for Spin Transfer was due to the anticipated valuation at which the company will finance in Q4 2018 pursuant to a signed conditional term sheet.

This reduction was offset in part by increases in OAV at both HawkEye<sup>360</sup> and BridgeSat due to financing rounds at each that closed in Q3 2018 and also from the new investments during the first half of 2018, Orbital Sidekick and TableUp.

# Valuation methodology

The group Ownership Adjusted Value represents the sum-of-the-parts ("SOTP") of, principally, the net present value ("NPV") or risk-adjusted net present value ("rNPV") from discounted cash flow ("DCF") valuations and valuations based on recent or imminent third party investment at the portfolio company level. The DCF valuations are updated when the underlying assumptions for the valuations warrant a change. Generally, valuations are not increased unless warranted by or in anticipation of a financing transaction. Valuations are decreased in situations where the portfolio company is falling short of expected progress. Otherwise, the valuations are kept constant. When available, financing transactions are used as the basis for the portfolio company valuation. In limited instances other techniques such as those based on asset values are utilised. Further details about the Group valuation methodology are disclosed in the 2017 Annual Report and Accounts.

Portfolio companies for which the Ownership Adjusted Value was based on a funding transaction accounted for 95.6% of total OAV in the current year (2017: 95.9%), and those based on DCF or other alternative methods accounted for 4.4% (2017: 4.1%).

For detail of the Net Present Value ("NPV") method used in estimating the group valuations from discounted cash flows see footnote 7.

# 3. Investments at fair value

The Group's investments at fair value represent securities of portfolio companies where Allied Minds holds a minority stake in those companies. These investments are initially measured at fair value through profit or loss and are subsequently re-measured at fair value at each reporting date.

Those investment are presented in the below table:

	30 June 2018 \$'000	Finance (income)/cost from IFRS 9 fair value accounting \$'000	Additions \$'000	31 December 2017 \$'000
Orbital Sidekick	3,500	_	3,500	_
TableUp	4,000		4,000	
Total investments at fair value	7,500		7,500	

On 6 April 2018, Allied Minds made an investment in Orbital Sidekick, a company developing capabilities in aerial and space-based hyperspectral imaging and analytics, initially for the oil and gas industry. Allied Minds led the Series Seed Preferred Stock financing with a total investment of \$3.5 million for a significant minority stake. As a result of the transaction, Allied Minds is able to exercise significant influence over the entity by virtue of its large, albeit minority, stake in the company and its representation on the Orbital Sidekick board of directors. Due to the liability-like characteristics of the Series Seed Preferred Stock instrument of Orbital Sidekick in which Allied Minds invested, conversely the investment is accounted for under IFRS 9 and is classified by the Company as an investment at fair value.

On 6 April 2018, Allied Minds made an investment in TableUp - a software provider enabling end-toend transparency through the restaurant supply chain to enable more effective inventory and operations management. Allied Minds led the Series A Preferred Stock financing with a total investment of \$4.0 million for a significant minority stake. As a result of the transaction, Allied Minds is able to exercise significant influence over the entity by virtue of its large, albeit minority, stake in the company and its representation on the TableUp board of directors. Due to the liability-like characteristics of the Series A Preferred Stock instrument of TableUp in which Allied Minds invested, conversely the investment is accounted for under IFRS 9 and is classified by the Company as an investment at fair value.

# 4. Earnings per share

The calculation of basic and diluted earnings per share has been calculated by dividing the loss for the period attributable to ordinary shareholders of \$12.5 million (HY17: \$44.6 million), by the weighted average number of ordinary shares outstanding of 239,502,783 (HY17: 234,425,464) during the sixmonth period ended 30 June 2018:

# Loss attributable to ordinary shareholders:

	30 June 2	018	30 June 2017	
For the six months ended:	Basic \$′000	Diluted \$'000	Basic \$′000	Diluted \$'000
Loss for the year attributed to the owners of the Company	(12,538)	(12,538)	(44,645)	(44,645)
Loss for the year attributed to the ordinary shareholders	(12,538)	(12,538)	(44,645)	(44,645)

### Weighted average number of ordinary shares:

	30 June	2018	30 June 2017		
For the six months ended:	Basic	Diluted	Basic	Diluted	
Issued ordinary shares on 1 January	238,202,541	238,202,541	233,744,378	233,744,378	
Effect of vesting of RSUs	559,377	559,377	277,271	277,271	
Effect of share options exercised	740,865	740,865	403,815	403,815	
Weighted average ordinary shares	239,502,783	239,502,783	234,425,464	234,425,464	

# Loss per share:

	30 June 20	30 June 2017		
For the six months ended:	Basic \$	Diluted \$	Basic \$	Diluted \$
Loss per share	(0.05)	(0.05)	(O.19)	(0.19)

The Group has only one class of potentially dilutive ordinary shares. These are contingently issuable shares arising under the UK Long Term Incentive Plan ("LTIP"). Based upon information available at the end of the reporting period, no portion of the awards under the LTIP has vested. Consequently, there are no potentially dilutive shares outstanding at the period end.

# 5. Share capital, share premium and reserves

Various option holders in the U.S. Stock Plan exercised their options, resulting in additional share premium of \$1.6 million (HY17: \$0.9 million). The table below explains the composition of share capital:

As of the period ended:	30 June 2018 \$'000	31 December 2017 \$'000
Equity		
Share capital, £0.01 par value, issued and fully paid 240,314,745 and 238,202,541, respectively	3,743	3,714
Share premium	160,170	158,606
Merger reserve	263,367	263,367
Translation reserve	_	89
Accumulated deficit	(363,338)	(354,443)
Equity attributable to owners of the Company	63,942	71,333
Non-controlling interests	(40,573)	(59,241)
Total equity	23,369	12,092

# 6. Non-controlling interests

The following summarises the changes in the non-controlling ownership interest in subsidiaries by reportable segment, calculated on the basis of percentage ownership of non-controlling interest in voting stock on an as converted basis, excluding liability classified preferred shares:

	Early stage \$'000	Later stage \$'000	Consolidated \$'000
Non-controlling interest as of 31 December 2017	(4,371)	(54,870)	(59,241)
Share of comprehensive loss	(473)	17,264	16,792
Effect of change in Company's ownership interest	(219)	499	280
Equity-settled share based payments	_	1,596	1,596
Non-controlling interest as of 30 June 2018	(5,063)	(35,510)	(40,573)

# 7. Subsidiary preferred shares

Certain of the Group's subsidiaries have outstanding preferred shares which have been classified as a subsidiary preferred shares in current liabilities in accordance with IFRS 9 as the subsidiaries have a contractual obligation to deliver cash or other assets to the holders under certain future liquidity event and/ or a requirement to deliver a variable number of common shares upon conversion.

The following summarises the subsidiary preferred shares balance:

As of the period ended:	30 June 2018 \$'000	Finance (income)/cost from IFRS 9 fair value accounting \$'000	Additions \$'000	31 December 2017 \$'000
BridgeSat	352	13	_	339
Federated Wireless	47,775	742	_	47,033
HawkEye <sup>360</sup>	11,564	(1,948)	_	13,512
Precision Biopsy	23,143	(2,830)	—	25,973
SciFluor Life Sciences	22,368	(9,986)	—	32,354
Signature Medical	530	_	—	530
Spin Transfer Technologies	37,638	(34,507)	10,256	61,889
Total subsidiary preferred shares	143,370	(48,516)	10,256	181,630

In April 2018, Spin Transfer completed a bridge financing round and raised \$10.3 million from existing shareholders of the Group in exchange for special convertible shares of the company ("special stock"), which converts into the next funding round of the subsidiary. The special stock have been classified as a subsidiary preferred shares in current liabilities in accordance with IFRS 9 as the subsidiary has a contractual obligation to deliver cash or other assets to the holders under certain future liquidity event and/or a requirement to deliver a variable number of common shares upon conversion.

The redemption is conditional on occurrence of uncertain future events beyond the control of the Group. The amount that would be payable in case of such events is as follows:

As of the period ended:	30 June 2018 \$'000	31 December 2017 \$'000
BridgeSat	325	325
Federated Wireless	50,000	50,000
HawkEye <sup>360</sup>	8,500	8,500
Precision Biopsy	22,000	22,000
SciFluor Life Sciences	25,200	25,200
Signature Medical	500	500
Spin Transfer Technologies	60,256	50,000
Total liquidation preference	166,781	156,525

# Valuation methodology

The Company determined the fair market value of the instrument based on the implied value from a third party funding round, where applicable, or based on a Net Present Valuation ("NPV") method. The NPV is a standard technique used in valuation and can be defined as the difference between the present value of the future cash flows from an investment and the amount of investment. Present value of the estimated cash flows is computed by discounting them at the required rate of return which includes an adjustment for risk. As discussed in footnote 2, the fair value of Spin Transfer is based on the anticipated valuation at which the company will finance in Q4 2018 pursuant to a signed conditional term sheet.

Whilst the Board considers the methodologies and assumptions adopted in these valuations are supportable, reasonable and robust, because of the inherent uncertainty of valuation, those estimated values may differ significantly from the values that would have been used had a ready market for the investment existed and the differences could be significant.

The principal methods the Group applies for allocation of value are the Probability-Weighted Expected Return Method ("PWERM"), the Option Pricing Method ("OPM"), and the Monte Carlo method.

The PWERM estimates the value of equity securities based on an analysis of various discrete future outcomes, such as an IPO, merger or sale, dissolution, or continued operation as a private enterprise until a later exit date. The equity value today is based on the probability-weighted present values of expected future investment returns, considering each of the possible outcomes available to the enterprise, as well as the rights of each security class.

The OPM treats common stock or derivatives thereof as call options on the enterprise's value or overall equity value. The value of a security is based on the optionality over and above the value securities that are senior in the capital structure (e.g. preferred stock), considering the dilutive effects of subordinate securities. In the OPM, the exercise price is based on a comparison with the overall equity value rather than per-share value.

The Monte Carlo method utilises a Geometric Brownian Motion process with 50,000 simulations to value the shares. The model takes into account share price volatilities, risk-free rate and other covariance of comparable public companies and other market data to predict distribution of relative share performance.

# Allocation model inputs

The following presents the quantitative information about the significant unobservable inputs used in the fair value measurement of the Group's subsidiary preferred shares liability:

As of the period ended:	30 June 2018	31 December 2017
Volatility	28.5% — 75.1%	29.0% — 79.3%
Time to liquidity (years)	1.20 - 4.07	1.70 — 4.57
Risk-free rate	2.37% - 2.68%	1.85% — 2.15%

The change in fair value of the subsidiary preferred shares is recorded in Finance cost from IFRS 9 fair value accounting in the consolidated statement of comprehensive loss.

# 8. Share-based payments

The share-based payments expense for the period was \$5.5 million (HY17: \$2.8 million) comprising of charges related to the LTIP and the other subsidiary plans. The primary changes affecting the half year period were related to the following:

# a) UK Long Term Incentive Plan

Under the UK Long Term Incentive Plan ("LTIP"), awards over Ordinary Shares may be made to employees, officers and Directors, and other individuals providing services to the Company and its subsidiaries. Awards may be granted in the form of share options, share appreciation rights, restricted or unrestricted share awards, performance share awards, restricted share units, phantom-share awards and other share-based awards, with the intent that awards will normally vest only after a minimum period of three years from the date of grant. Vesting is subject to the achievement of certain performance conditions and continued services of the participant.

Awards have been granted under the LTIP based on the following vesting criteria:

- awards subject to performance conditions based on the Company's total shareholder return ("TSR") performance or relative total shareholder return (rTSR) performance over a defined period of time;
- awards subject to performance conditions based on a basket of shareholder value metrics ("SVM"). Performance is assessed on these measures on a scorecard basis over a defined period of time;
- awards that vest 100 per cent after a period of time subject to continued service condition only.

The Company issued awards under the LTIP during the six months ended 30 June 2018 and 2017 in respect of a total of 3,924,851 and 6,714,772 Ordinary Shares, respectively. A summary of stock option activity under the UK LTIP for the six months ended 30 June 2018 and 2017, respectively, is shown below:

For the six months ended:	30 June 2018			30 June 2017		
	TSR	SVM	Time	TSR	SVM	Time
Number of shares granted at maximum ('000)	3,481	_	444	2,456	1,632	2,627
Weighted average fair value per share (£)	1.13	_	1.12	0.87 - 0.89	1.44	1.44
Fair value measurement basis	Monte Carlo	Market value of ordinary share	Market value of ordinary share	Monte Carlo	Market value of ordinary share	Market value of ordinary share

The share grants that vest upon the occurrence of a market condition (i.e. the TSR performance) and service condition were adjusted to current market price at the date of the grant to reflect the effect of the market condition on the non-vested shares' value. The Company used a Monte Carlo simulation analysis utilising a Geometric Brownian Motion process with 50,000 simulations to value those shares. The model takes into account share price volatilities, risk-free rate and other covariance of comparable UK public companies and other market data to predict distribution of relative share performance. This is applied to the reward criteria to arrive at expected value of the TSR awards.

The share grants that vest only upon the occurrence of a performance condition (i.e. the SVM grants) and service condition or upon passage of time were valued at the fair value of the shares on the date of the grants the vesting conditions are taken into account. The number of instruments included in the measurement

of the transaction amount is subsequently adjusted so that, ultimately, the amount of recognised share-based expense is based on the number of instruments that eventually vest.

The accounting charge does not necessarily represent the intended value of share-based payments made to recipients, which are determined by the Remuneration Committee according to established criteria. The share-based payment charge for the period related to the UK LTIP was \$3.9 million (HY17: \$1.9 million).

During the six months period ended 30 June 2018, 1,224,831 units vested under the LTIP and the equivalent number of common stock shares were issued to current and former employees and directors of the Group in exchange for a settlement price of £0.01 per share.

# b) U.S. Stock Option/Stock Issuance Plan

The U.S. Stock Option/Stock Issuance Plan ("U.S. Stock Plan") was originally adopted by Allied Minds, Inc. (now Allied Minds, LLC) in 2008. The U.S. Stock Plan provides for the grant of share option awards, restricted share awards, and other awards to acquire common stock of Allied Minds, Inc. (now Allied Minds, LLC). All stock options granted to employees under this plan are equity settled, for a ten-year term. In 2014, Allied Minds plc adopted and assumed the rights and obligations of Allied Minds, Inc. (now Allied Minds LLC) under this plan except that the obligation to issue Common Stock is replaced with an obligation to issue ordinary shares to satisfy awards granted under the U.S. Stock Plan. As of 19 June 2014, the maximum number of options reserved under the plan were issued and outstanding and as a result of the Company's IPO in 2014, all issued and outstanding options vested on 19 June 2014. The Company does not intend to make any further grants under the U.S. Stock Plan.

A summary of stock option activity in the U.S. Stock Plan for the six months ended 30 June 2018 and 2017, respectively, is presented in the following table:

For the six months ended:	30 June	2018	30 June 2017	
	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price
Outstanding as of 1 January	7,499,116	\$2.21	8,554,712	\$2.12
Exercised during the period	(887,373)	\$1.78	(501,866)	\$1.85
Forfeited during the period	(5,311,743)	\$2.30	_	
Outstanding as of period end	\$1,300,000	\$2.15	8,052,846	\$2.14
Exercisable at period end	\$1,300,000	\$2.15	8,052,846	\$2.14
Intrinsic value of exercisable	\$ nil		\$1.9 million	

For the six months ended 30 June 2018, former employees exercised options to purchase 887,373 shares (HY17: 501,866) of the Company stock, resulting in \$1.6 million (HY17: \$0.9 million) additional share premium for the period.

# 9. Related party transactions

# a) Key management personnel compensation

For the six months ended:	30 June 2018 \$'000	30 June 2017 \$′000
Short-term employee benefits	909	1,602
Share-based payments	3,713	7,383
Total	4,622	8,985

Compensation of the Group's key management personnel includes salaries, health care and other non-cash benefits. Share-based payments are subject to vesting terms over future periods.

# b) Key management personnel transactions

For the six months ended:	30 June 2018 \$'000	30 June 2017 \$′000
Non-executive Directors' fees	246	224
Non-executive Directors' share-based payments	225	275
Total	471	499

Executive management and Directors of the Company control 0.5% (FY17: 0.2%) of the voting shares of the Company as of 30 June 2018.

# 10.Subsequent events

The Company has evaluated subsequent events through 27 September 2018, which is the date the Condensed Consolidated Interim Financial Statements are available to be issued.

# BridgeSat

In August 2018, BridgeSat secured an investment of \$10.0 million led by Boeing Company, in exchange for 7,098,240 Series B preferred shares of the company, of which Allied Minds provided \$5.0 million and the balance was provided by Boeing HorizonX Ventures. The funds will provide the required resources to accelerate the build out of BridgeSat's optical ground station network. As a result of the transaction, the ownership interest of Allied Minds in BridgeSat changed to 81.38%.

# HawkEye<sup>360</sup>

In September 2018, HawkEye<sup>360</sup> completed an investment of \$14.9 million led by Raytheon Company, in exchange for 4,600,754 Series A-3 preferred shares of the company, of which Allied Minds provided \$3.8 million. The balance was provided by new and existing shareholders of the company including Raytheon Company, Sumitomo Corporation of America, Razor's Edge Ventures, Shield Capital Partner's Seed Fund, Space Angels Network. Proceeds from the transaction will be applied to fund the development, build and launch costs of the company's first commercial satellite cluster and for general commercial purposes. As a result of the transaction, the ownership interest of Allied Minds in HawkEye<sup>360</sup> changed to 48.35%.

# QuayChain

In September 2018, the Company formed a new subsidiary QuayChain, Inc. that plans to provide CBRSenabled connected digital infrastructure as multi-user industrial locations such as international cargo ports and large industrial real estate complexes, enabling operators and users to secure efficiencies in supply chain management. QuayChain plans to create private LTE networks and deploy proprietary connected devices and sensors. This infrastructure will enable a single IoT platform for the collection and analysis of real-time data across the Smart Industrial Hub. Applications will be developed to harness this data to improve the efficiency of existing supply chain work flow. As a result of the transaction, the ownership interest of Allied Minds in QuayChain is 72.22%.

# STATEMENT OF DIRECTORS' RESPONSIBILITIES

The Directors confirm to the best of their knowledge that:

- a) the Condensed Consolidated Interim Financial Statements have been prepared in accordance with IAS 34, Interim Financial Reporting, as adopted by the European Union and give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group as required by the FCA's Disclosure Guidance and Transparency Rules (4.2.4R); and
- b) the Interim Management Report includes a fair review of the information required by the FCA's Disclosure Guidance and Transparency Rules (4.2.7R and 4.2.8R).

The Directors of Allied Minds plc and their functions are listed below.

By order of the Board

Peter Dolan, Non-Executive Chairman Jill Smith, President & Chief Executive Officer

27 September 2018

# COMPANY INFORMATION

### Company Registration Number 08998697

# **Registered** Office

Beaufort House 51 New North Road Exeter EX4 4EP United Kingdom

Website www.alliedminds.com

# **Board of Directors**

Peter Dolan (Non-Executive Chairman) Jill Smith (President & Chief Executive Officer) Harry Rein (Independent Non-Executive Director) Jeffrey Rohr (Independent Non-Executive Director) Kevin Sharer (Independent Non-Executive Director) Fritz Foley (Independent Non-Executive Director)

# Company Secretary

Michael Turner