Company number 03568010 (England and Wales)

Microsaic Systems plc

Annual Report and Accounts

31 December 2018

CORPORATE INFORMATION AND ADVISORS

Directors	Peter Grant Glenn Tracey Bevan Metcalf Chris Buckley Andrew Holmes Eric Yeatman
Company Secretary	Andrew Holmes
Company number	03568010
Company website	www.microsaic.com
Registered office	GMS House Boundary Road Woking Surrey GU21 5BX
Auditors	Saffery Champness LLP Chartered Accountants 71 Queen Victoria Street London EC4V 4BE
Bankers	HSBC Bank plc 95 Gloucester Road London SW7 4SX
Solicitors	Dorsey & Whitney (Europe) LLP 199 Bishopsgate London EC2M 3UT
Nominated adviser and broker	N+1 Singer 1 Bartholomew Lane London EC2N 2AX
Registrars	Neville Registrars Limited Neville House Steelpark Road Halesowen B62 8HD
Financial PR	IFC Advisory 24 Cornhill London EC3V 3ND

CONTENTS

HIGHLIGHTS & EVENTS

Financial highlights

- Revenues up 69% at £578,258 (2017: £342,514);
- Gross margin 42% versus 35% last year;
- Operating expenses are 8% above last year due to investment in business development;
- The basic loss per share fell by 42% from 1.46p to 0.85p per share mainly as a result of the increase in the number of shares in issue following the fundraise; and
- Cash balances at year end are £5.4m (2017: £3.2m) and in line with the Board's expectations following the June 2018 fundraising.

Key events

- Unit sales, half of which were from new customers, were double those of 2017;
- Signed seven new commercial agreements, with two OEM partners and five distributors;
- Widened commercial reach, to cover the EU, North America, China and Southeast Asia;
- Launch of 4500 MiD® Detector;
- Announcement of large-protein Detector, the Microsaic MiD® ProteinID, ranked among the top innovative products of 2018 by The Analytical Scientist Innovation Awards.
- Successful fundraise in June 2018 of £5.05m (net of expenses);
- Bioprocessing collaboration terminated by partner due to their internal strategy, despite the Company meeting its milestones;
- Outsourced product assembly and test; and
- ISO 9001 2015 accreditation.

CHAIRMAN'S STATEMENT
For the year ended 31 December 2018

On behalf of the Board, I am pleased to present the Company's Annual Report and Accounts for the year ended 31 December 2018.

During 2018, the Company has made good progress with its transformation from an R&D led company to a commercially focussed business. The Company's commercial reach into the traditional small molecule market for mass spectrometry ("MS") has been extended by adding seven further partnerships, bringing the total in the year to eight and boosting sales by 69% compared with last year. With the current interest and pipeline development we are seeing, we are confidently pursuing our goal to achieve cash breakeven from sales to the traditional small molecule market.

In the biopharmaceutical market, good progress was made with third parties generating independent data to support discussions with potential partners. As announced in December 2018, it was disappointing that our long-standing partner decided not to proceed into the commercialisation phase despite the successful completion of Phase 2, but this was for its own internal reasons and not a reflection on the Company's differentiated technology. The Board remains convinced that bioprocessing is an important potential market for Microsaic's products and is in discussion with a number of potential partners in this area.

In June 2018, £5.05m (net of expenses) was raised in equity from new and existing shareholders and this has considerably strengthened the balance sheet to enable Microsaic to pursue its strategic objectives. We concluded 2018 with £5.4m cash in the bank and have the means to continue to invest in a focussed way on commercial and product development.

Professor Andrew Holmes, who was a co-founder of the Company, has decided to step down from the Board and as Company Secretary at the forthcoming Annual General Meeting on 14 May 2019. The Board thanks him for his dedication and support to the Company over 18 years. Bevan Metcalf, Finance Director, will take on the additional responsibilities of Company Secretary from 14 May 2019.

I would like to also take this opportunity to thank shareholders, employees, customers and partners for their support during the year. We continue to look forward with confidence.

Peter Grant
Chairman
8 March 2019

STRATEGIC REPORT - Chief Executive's Review
For the year ended 31 December 2018

Introduction

2018 was a year of accelerating growth for the business. Microsaic has increased its customer base from one active partner to eight and has extended its geographic reach to now include Southeast Asia, Europe and North America, with further growth planned in 2019.

As Chief Executive Officer for just over a year, I am encouraged by the Company's progress, particularly in business development, which continues to expand globally. This has contributed to top-line growth in 2018 of 69%, and I am confident that we will continue to see strong growth in 2019. I am also pleased with our operational development, following the transfer of our clean-room facility and assembly to our manufacturing partner. Targeted investment will be made in 2019 to further strengthen our capabilities in commercialisation and product development.

The collaboration with our long-standing partner in bioprocessing was completed successfully, with a clear addressable market identified and positive feedback received from potential customers. Whilst our partner is not taking the project forward into the final commercialisation phase at present, as it has decided to focus its resources on its own internal projects in support of its core business, the Directors continue to believe that there is a significant market opportunity in bioprocessing for the Company's highly differentiated point of need MS instruments. Furthermore, the positive additional independent data received at the end of 2018 provides further validation of the opportunity which the Company is pursuing vigorously.

Progress during 2018

The Company successfully raised £5.05m (net of expenses) during 2018 to commercialise the Company's opportunities in bioprocessing, and to further enhance the Company's miniaturised MS instruments. This is designed to ensure the continued competitiveness of the Company's product range and to create additional market opportunities.

The Company doubled its unit sales in 2018 compared with last year, and half of the sales were from new customers. In addition, Microsaic signed seven new commercial agreements, with two OEM partners and five distributors. This demonstrates the Board's strategy to widen the Company's commercial reach, which now includes Europe, North America, China and Southeast Asia.

Microsaic's new OEM agreements with Unimicro Technologies Inc. and Knauer Wissenschaftliche Geräte GmbH will focus on the integration of Microsaic's compact MS systems into their unique low flow rate capillary electrophoresis (CE) and high-quality liquid chromatography platforms respectively, with the aim of enhancing the combined technologies' applications, particularly in pharmaceutical discovery. Our global partner, Gilson Inc., continues to grow its preparative chromatography equipment alongside the MiD® MS technology globally.

New agreements with Rightek Co., Ltd, Stable Arm Sdn. Bhd., and Amedis spol.sro, all value-add re-sellers and distributors of specialist analytical instrumentation, establish the distribution of Microsaic's new 4500 MiD® MS Detector in Taiwan, Malaysia and Central Europe respectively.

Signing with Omicron Research Ltd has opened a distribution channel which combines Microsaic's technology with CAMAG Thin Layer Chromatography ("TLC") instrumentation. Microsaic has also signed an agreement with iChrom Solutions Inc for distribution of the new 4500 MiD® MS Detector in the United States and Canada. As a full-service instrument distributor, iChrom serves several industries including drugs of abuse (DOA), clinical chemistry, and drug development in both the small molecule pharmaceutical applications and protein characterisation.

2018 saw Microsaic launch the 4500 MiD® MS Detector, which the Directors believe will be attractive to the growing market for laboratory-based applications with larger biological molecules, such as peptides and small proteins, as well as helpful for capturing further growth in traditional chemical analysis.

Microsaic has made good progress in extending its product capabilities further into bioprocessing applications, where a range of biological entities, including monoclonal antibodies, can be analysed in a matter of minutes, generating both cost and time saving opportunities. This compares with traditional analysis, often in remote centralised laboratories, sometimes taking many days or even weeks to produce results. In collaboration with partners including Massachusetts Institute of Technology (MIT), and the Centre for Process Innovation (CPI), Microsaic has demonstrated its capabilities in small and large molecule in-situ analysis. Data from these studies is being used to support discussions with potential new partners.

In December 2018, the Company announced that the MiD® ProteinID was ranked among the top innovative products of 2018 by The Analytical Scientist Innovation Awards. This product offers a break-through technology allowing for large protein MS-detection and will form the basis of partnership discussions in bioprocessing applications.

Strategic Focus

Key Markets

Microsaic is targeting two broad market sectors for its MS technology: bioprocessing – the manufacture of biologic drugs; and the traditional markets in chemical analysis. The Directors believe that the Company's products offer significant competitive opportunities by providing easy to use MS analysis at the point of need.

Evolution of Microsaic's MS applications for traditional markets in chemical analysis

Evolving end-user needs from rising productivity pressures means that Microsaic's technology value proposition is now increasingly demanded in these traditional markets, as shown by the Company's progress in signing new partners.

Evolution of Microsaic's MS applications for Healthcare and Lifesciences

Biologic drugs represented eight out of ten top selling drugs in 2017, and EvaluatePharma estimates that revenues will reach over $380Bn by 2024. The Directors believe that the total market for bioprocessing equipment in the pharmaceutical industry is currently in the region of $15Bn.

Biologic manufacture demands real-time analysis throughout the entire process: the raw in-coming goods, the upstream 'in-cell' drug production and subsequent downstream product purification.

Microsaic's technology is a powerful point of use analysis tool within complex biologic scale-up and manufacturing equipment workflows. A typical workflow requires real-time data to drive production optimisation, ensure process-control compliance and reduce risk for the final product. The Company's technology lends itself to a range of biologic applications, including the production of large protein antibodies and peptides and in the production of cell therapy products, using emerging production processes.

Microsaic's advanced MiD® ProteinID Detector for biologics analysis is proven to measure feedstocks, metabolites and final product simultaneously. The Directors believe that this product can significantly improve efficiency and process control compared with traditional detection methods, which often involve sending samples to be analysed by specialists in a separate laboratory, possibly off site, and then waiting for results to return, potentially several days or weeks later, before knowing whether the batch meets the required quality standards.

The Company's continued investment in state-of-the-art product design for point of need MS Detection will ensure current and future compliance with customer expectations in a wide range of bioprocessing applications.

Business Model

Building long-term co-development partnerships establishes greater competitive advantage

Microsaic's core strengths are its technical and product development capabilities and its experience in working with OEM partners to co-develop integrated separation and detection systems.

The Company derives revenues from R&D collaboration agreements, sale of products, sale of consumables and spare parts, and service and support income.

The Company's commercial approach is highly flexible to suit each partner's needs, helping to craft the OEM's application in the early stages of scientific proof of principle, or into a broader product concept. Microsaic has proven expertise in technology development and commercialisation. Microsaic also brings expertise from its leading scientists, technologists, and engineers to meet the OEM's near term or longer-term challenges.

The Company's commercial strategy is to partner with OEMs and distributors which have established sales and service channels.

Building partnerships over the long-term will establish greater competitive advantage for the Company, as its products are tailored to specific application needs.

Performance Measurement

The ongoing performance of the Company is managed and monitored using several key financial and non-financial performance indicators as detailed below.

The Company's revenues are monitored as follows:

Revenue	Year to 31 December 2018	Year to 31 December 2017	Inc/(Dec)
	£	£	%
Products	467,372	229,400	103.7
Consumables and spare parts	102,090	96,797	5.5
Service and support	8,796	16,317	(46.1)
Total	578,258	342,514	68.8

Revenues comprise sale of products, sale of consumables and spare parts, and service and support income. The Board is encouraged by the sales performance in 2018 which follows increased business development efforts to add more customers. In total, the Company announced that it had signed two OEMs and five distributors during 2018. Efforts will continue in 2019 to sign new customers to extend the Company's geographic reach, especially in Southeast Asia.

The Company's trading results and cash are monitored on a monthly basis and for the full year were as follows:

Profit/(Loss) & Cash Metrics	Year to 31 December 2018	Year to 31 December 2017	Inc/(Dec)
	£	£	%
Loss from operations before share-based payments, interest & tax	(2,985,363)	(2,877,366)	3.8
Net cash used in operating and investing activities	(2,831,270)	(2,546,368)	11.2
Cash and cash equivalents	5,402,221	3,182,176	69.8

STRATEGIC REPORT - Chief Executive's Review
For the year ended 31 December 2018

The Company's profitability is monitored against budget and forecast on a monthly basis. The increase in the loss from operations in the year was in line with management's expectations following targeted investment in R&D (which is all expensed as incurred) and business development goals. The Company monitors its cash position monthly and forecasts are updated on a regular basis. The year-end cash position was in line with the Company's internal forecasts at the time of the fundraising in June 2018.

Non-financial key performance indicators measure a number of areas, including commercial and operational targets, such as customer feedback, manufacturing lead times and quality measures from the Company's ISO9001:2015 system. Another key non-financial indicator is the feedback from our customers. This information is used to optimise the Company's product, its applications and training programmes.

Financial Results

Profit and Loss

Total revenue at £578,258 increased by 68.8% compared with last year (2017: £342,514), principally from increased product revenue which increased by 103.7% to £467,372. Consumable and spare parts revenue amounted to £102,090 and service and support income was £8,796.

Gross profit for 2018 of £241,573 was double last year's figure. The gross margin percentage of 41.8% was significantly higher than last year (2017: 35.4%) and reflects improved pricing on unit sales.

Other operating income amounted to £76,262 (2017: £51,004) which represented co-development income from our bioprocessing partner. As mentioned earlier, this collaboration was terminated in December 2018.

Operating expenses at £3,303,198 (2017: £3,049,611), increased by 8.3% (£253,587). The increase in expenses was as anticipated in last year's Annual Report and Accounts and included: expenses associated with the fundraising charged to the P&L (£39,962), additional travel (£42,016), additional marketing (£74,152) and additional payroll costs (£164,441). Total R&D expenses at £874,185 were similar to 2017 (£893,579).

The loss for the year, before share-based payments, interest and tax, increased by 3.8% to £2,985,363 (2018: £2,877,366).

Finance income increased by £12,301 over 2017 to £31,046, while share-based payments increased by £58,326 to £88,187 following the award of 9m options in January 2018.

The tax credit for the year of £278,543 (2017: £245,479) represents the R&D tax credit claim.

The total comprehensive loss increased by 4.6% to £2,763,961 (2017: Loss £2,643,003), due mainly to the investment in operating expenses. The basic loss per share fell from 1.46p to 0.85p per share as a result of the increase in the number of shares in issue following the fundraise.

STRATEGIC REPORT - Chief Executive's Review
For the year ended 31 December 2018

Balance Sheet

Total assets at £6,732,706 are £2,359,840 above last year, mainly due to the higher cash balance at the year end. The Company raised £5,500,000 before expenses in June 2018.

Equity at £6,275,472 is £2,375,541 above last year. This can largely be explained by the gross proceeds of the fundraising offset by fundraising expenses and retained losses in the year.

Total liabilities at £457,234 are in line with 2017. Total equity and liabilities at £6,732,706 are £2,359,840 above last year.

Cash Flow

The cash and cash equivalents balance at the end of the year is £5,402,221, which is £2,220,045 above last year. Of this £3.0m was on 95-day deposit terms with two well-rated financial institutions earning 1% to 1.1% annual interest.

Net cash used in operating activities of £2,715,676 is £264,752 higher than in 2017. This was mainly the result of additional operating expenses incurred in 2018 as described above. The decrease in trade and other payables of £136,631 was largely off-set by an increase in trade and other receivables, following a higher level of sales in December 2018 versus December 2017.

Cash flow used in investing activities of £115,594 was £20,150 higher than in 2017. This was mainly due to an increase in expenditure on intangible assets including intellectual property and software.

Net cash from financing activities amounted to £5,051,315 after share issue costs of £448,685.

Going Concern

Following the successful financing in June 2018, and having considered the plans and prospects for the business, the Board believes that the Company has enough cash to cover its anticipated working capital requirements for at least the next 12 months from the date of signing of the Annual Report and Accounts. Therefore, the Directors have adopted the going concern basis of reporting in preparing the financial statements. The Board's assessment of the going concern basis is explained in more detail in Note 3.

Risk Management

The Company manages risk from an operational perspective, where it assesses and weighs up the potential risks to the business and how it can mitigate these risks. The Board has reviewed the risks and uncertainties facing the Company and has identified the following risks and associated mitigating actions as follows:

Description	Risk	Risk rating pre-mitigation	Mitigating action	Risk rating post-mitigation
Unable to grow sales very significantly in line with the Board's plans	Sales growth is too slow to achieve cash breakeven	MEDIUM	Continue to invest in sales and marketing to sign additional partners, support existing partners, and promote the Company's products and capabilities	MEDIUM/ LOW
Unable to raise additional funds if required in the future	Inability to continue as a going concern	HIGH	Work closely with our advisors and communicate effectively with shareholders and investors. Ensure the business plan is effectively implemented and revenue forecasts are achieved	MEDIUM
Delay in bringing product development with OEM partners to market	Delay in developing and commercialising a combined product offering with an OEM partner	MEDIUM	Ensure the process is clearly defined and milestones are realistic. Continually monitor progress in each stage of the process and address delays promptly	LOW
Retention and recruitment of key R&D employees	Loss of key employees and subsequent difficulty in recruiting suitably qualified and skilled replacements	LOW/MEDIUM	Ensure the Company's remuneration package is competitive. Retain key staff by investing in their development	LOW
Loss of competitive advantage in miniaturised mass spectrometry	Competitors developing competing products in biologicals	MEDIUM/ HIGH	The Company must continue to innovate and focus on its strengths around point of care, ease of use and functionality. The Company believes the market is big enough for competitors to co-exist	MEDIUM
Reliance on third party manufacturing facilities	A replacement manufacturer is necessary	MEDIUM	Work closely with our key manufacturing partner and hold regular review meeting. Ensure contingency plans are prepared and reviewed. Where possible cover potential risk through insurance	LOW

The key risk for the Company is the need to grow sales very significantly and achieve cash breakeven over the coming years.

The Board has reviewed the potential impact of Brexit on the Company and its operations. In summary, the Company's operations and key subcontractors are based in the UK and most of its sales are priced in GBP to customers globally, mitigating exchange rate risk. Apart from the effect of any potential macro-economic impact, for example from leaving the EU without a deal, the Board does not currently anticipate that there will be a significant impact on the Company's operations or financial performance. However, when the UK leaves the EU, and assuming there is no customs union, there are likely to be extra costs in the form of tariffs (both from importing certain components and exporting) and increased administration around shipping documentation, which the business may have to absorb. There may also be delays in completing the necessary procedures for import/export and in physically shipping the products and receiving components. The Company has taken steps to stockpile key imported components to mitigate the risk of disruption in the event that the UK leaves the EU without a transition period. The Board is keeping this matter under review, and will update shareholders as more information becomes available.

The business is dependent on one key supplier for the manufacture of its products. It monitors the performance and the financial health of this supplier and holds regular review meetings. The Company reviews its contingency planning to ensure that if a key supplier relationship ends, an action plan can be implemented in a timely manner. The Company believes the risk rating of this risk, after mitigation is low.

Company and Product Overview

Microsaic's product value proposition is designed to meet specific needs in its target markets, namely Healthcare and Lifesciences, and traditional chemical analysis.

Three design concepts underpin Microsaic's products: application versatility, walk-up technical accessibility and the ever-growing need for industry to know more, faster.

Microsaic has successfully developed and implemented advanced technology at the core of its design with over 60 patents to date, with the most recent encompassing a fast and easy to use software application for "red-light/green-light" protein identification during bio-molecular production.

The 4500 MiD® has been designed to be highly robust and has a greater mass range for the detection of larger molecules. Key features of the 4500 MiD® include:

- Fast install, low maintenance, and ease of use to non-specialist users;
- Best in class for power and utility requirements;
- Fits inside a standard fume hood without the need for an external pump;
- Integrated PC, remote operation, and intuitive to use;
- User serviceable consumable parts; and
- Open software for easy integration into laboratory systems.

To further expand the marketplace for the MiD®, the MiDas™ compact interface module offers automated liquid handling for direct MS analysis in real time at the laboratory bench or in the fume hood.

Product specifications are driven by end-user requirements. This will inform Microsaic's product strategy as its MS Detectors move from the laboratory into at-line and in-line production, and front-line operating environments. Microsaic will ensure that its strategic product development will remain focused on meeting demanding bioprocessing applications. However, many of these enhancements are expected to also provide a pipeline of competitive features able to address a wider range of small molecule application areas.

The Company has an on-going R&D programme building on the achievements already made and focused on increasing the reach of its core technology, which underpins the MiD®. The product pipeline also includes more sophisticated MS systems, including a triple quadrupole.

Longer-term, increasing trends towards personalised medicine present very significant opportunities, such as in cell therapy and point of care diagnostics, where rapid and accurate point-of-need bio-molecular detection will be essential to determining the right treatment for patients. These are major challenges for healthcare, and, although they are not part of the current development plans, the Board believes that the Company's technology has the potential to offer important solutions.

Outlook

Microsaic has added seven new partners in 2018 and is working to secure additional partners in traditional small molecule markets in 2019. Most of these partners have launched or are in the process of launching in their respective markets and the Board believes that this will lead to a significant growth in revenue in 2019.

While the relationship with its bioprocessing partner has not extended to the commercialisation phase at this point in time, Microsaic is in early stage discussions with several other potential partners in the Healthcare and Life Sciences sectors. The compelling independent data generated has been well-received and we remain optimistic about the commercial viability of our differentiated technology for large molecule applications.

In order to scale up manufacturing in anticipation of an increase in forecasted demand the Company will complete its outsourcing programme during 2019. This will lead to greater manufacturing efficiency, flexibility and capacity to meet the increasing demand that management are seeing. In the short term, this will have the consequence that cost of goods will increase, which will impact margins in 2019, but over time, as volumes grow, the Board anticipates costs will reduce substantially through volume-related discounts and process efficiencies.

As previously announced, the Company anticipates an increase in operating expenses in 2019 in line with its business plan to meet its commercialisation and product development goals. The main expense items to increase are payroll through additional hires in both R&D and business development, R&D contractors and materials, and travel.

Given progress to date with the products and collaborations, especially in the traditional small molecule market, the Board remains confident in the prospects for the business.

The Strategic Report was approved by the Board of Directors on 8 March 2019 and signed on its behalf by:

Glenn Tracey
Chief Executive Officer

DIRECTORS' REPORT
For the year ended 31 December 2018

The Directors present their report for the year ended 31 December 2018.

Principal activity, business review and business risks
The principal activity of the Company continued to be the research, development and commercialisation of miniaturised mass spectrometry instruments. A review of the business, its prospects and its research and development activities are contained within the Strategic Report.

Results and dividends
The results for the Company are given in the statement of comprehensive income set out on page 50. The Company is currently making losses and has retained losses which have to be recovered before it can pay a dividend. Therefore, the Directors do not recommend the payment of a dividend (2017: nil).

Research and development ("R&D")
R&D is fundamental to the Company's operations and has led to the filing of over 60 patents. During the year the Company had approximately 11 staff working on R&D. R&D expenses in 2018 were £874,186 (2017: £893,579) or 26.5% (2017: 29.4%) of total operating expenses. Subject to resources being available, current plans are to continue to invest in R&D, especially to support the enhancement of technology for the important bioprocessing market.

Directors
Since 1 January 2018 the following Directors have held office:
Peter Grant, Non-Executive Chairman (Age 63)
Glenn Tracey, Chief Executive Officer (Age 47)
Bevan Metcalf, Finance Director (Age 61)
Chris Buckley, Non-Executive Director (Age 57)
Andrew Holmes, Non-Executive Director (Age 54)
Eric Yeatman, Non-Executive Director (Age 56)

Peter Grant was appointed on 1 January 2018 as Non-Executive Chairman. At the forthcoming Annual General Meeting ("AGM"), Mr Andrew Holmes will retire after 18 years on the Board. Glenn Tracey, Chris Buckley and Eric Yeatman will retire and be proposed for re-appointment at the AGM as they have not been re-appointed at either of the two previous AGMs.

Directors' interests
The Directors' interests in the shares of the Company at 31 December 2018 were:

DIRECTORS' REPORT
For the year ended 31 December 2018

	Ordinary shares of 0.25p each at 31 December 2018		Ordinary shares of 0.25p each at 31 December 2017	
	Number	%	Number	%
Peter Grant	750,000	0.16	-	-
Glenn Tracey	800,000	0.18	300,000	0.17
Bevan Metcalf	1,050,000	0.23	300,000	0.17
Chris Buckley	550,000	0.12	300,000	0.17
Andrew Holmes	3,682,111	0.81	3,182,111	1.75
Eric Yeatman	4,646,632	1.02	3,896,632	2.14
	11,478,743	2.52	7,978,743	4.40

Significant shareholdings
Shareholders, excluding Directors, having a beneficial interest of 3% or more of the Company's shares as at 31 December 2018:

	Ordinary shares of 0.25p each at 31 December 2018	
Shareholder	Number	%
Parkwalk Advisors Funds	124,154,838	27.21%
Unicorn Asset Management	75,000,000	16.43%
Octopus Investments	43,104,281	9.45%
Herald Investment Management	34,199,625	7.49%
Walker Crips Group	25,559,000	5.60%
Fidelity Worldwide Investment	17,304,696	3.79%
Interactive Investor Trading	15,867,623	3.48%

Employees
The Company regards the expertise and contributions of its employees as critical to its future success. The Company engages with its employees to understand all aspects of the business and seeks to remunerate its employees fairly. The Company gives full and fair consideration to applications for employment received regardless of age, gender, colour, ethnicity, disability, nationality, religious beliefs or sexual orientation.

The Board takes account of employees' interests when making decisions, and suggestions from employees aimed at improving the Company's performance are encouraged.

DIRECTORS' REPORT
For the year ended 31 December 2018

Company share ownership plans
The Company operates two Employee Share Option Schemes ("ESOS"), an approved scheme and an unapproved scheme, for the benefit of its employees and Executive Directors.

The ESOS were formed to enable the incentivisation of employees to be aligned to the performance of the Company. Under the ESOS the Company grants employees options to acquire the Company's ordinary shares subject to:

- Vesting periods (normally three years for new grants) and a total exercise period of ten years from the date of grant;
- The exercise price normally being the market price of the ordinary shares at the close of business the day before the date of grant as agreed with HMRC; and
- Performance conditions, as appropriate.

Options are granted up to the maximum amount allowed under the limits of the Enterprise Management Incentive (EMI) Scheme - these options are called 'Approved Options'. The EMI Scheme is subject to the provisions of Schedule 5 of the Income Tax (Earnings and Pensions) Act 2003 and have tax advantages for the employee and employer. There is an unapproved scheme, which has no tax advantages, for those employees who do not qualify for the Approved Options.

The Company received approval at its 2011 AGM to issue equity securities to employees and Directors on conversion of their options up to a maximum of 10% of the Company's issued share capital over a rolling ten-year period. At 31 December 2018 456,365,146 shares were in issue, and so the maximum option pool is 45,636,515. Outstanding options at 31 December 2018 were 13,964,000. Since the Company was listed on AIM in 2011 1,534,100 shares have been issued in respect of exercised options. Thus, the remaining option pool at 31 December 2018 is 30,138,415 representing 6.6% of the shares in issue.

On 2 January 2018, the Company awarded options over 9m ordinary shares of 0.25 pence each in the Company.

Management of risk
The management of operational risk is covered in the Strategic Report. Financial risk is managed as follows:

Liquidity risk
The Company finances its operations from equity funding provided by shareholders and revenues generated by the business. The Company seeks to manage liquidity risk to ensure enough funds are available to meet working capital requirements.

The Company invests its cash reserves in short term bank and money market deposits as a liquid resource to fund its operations. The Company's strategy for managing cash is to balance interest income with counterparty risk ensuring the availability of cash to match the profile of the Company's cash flows.

Interest rate risk

The Company does not face any significant interest rate risk as it has no borrowings. Surplus funds are invested to maintain a balance between accessibility of funds, competitive rates, and counterparty risk while investing funds safely.

Credit risk

The Company manages its credit risk in cash and cash equivalents by spreading surplus funds between creditworthy financial institutions.

The Company is also exposed to credit risk attributable to trade and other receivables. The maximum credit risk in respect of the financial assets at each year end is represented by the balance outstanding on trade and other receivables. The Company has limited exposure to credit risk as the majority of its trade and other receivables are due from major corporations and institutions. The Company also monitors the creditworthiness of its customers on a regular basis.

Foreign currency risk

The majority of the Company's transactions are denominated in pounds sterling. The Company has no long-term commitments to purchase goods or services in foreign currencies. Purchases denominated in foreign currency are expensed at the exchange rate prevailing at the date of the transaction and represent an immaterial proportion of the Company's total expenditure.

The only assets and liabilities denominated in foreign currencies relate to trade receivables and trade payables with overseas counterparties together with small balances of US dollar and Euro currencies to settle these liabilities. The risks and sums involved are immaterial.

Health and safety and the environment

The Company is committed to providing a safe environment for its staff and other parties for whom it has a responsibility. It has set up systems and processes to ensure compliance with health and safety legislation and the Board considers health and safety matters at its regular monthly meetings.

The Company is also mindful of its corporate responsibilities concerning the impact of its activities on the environment and seeks to minimise this impact where practicable.

Quality Management System

The Company's mission is to supply, design and deliver mass spectrometry instruments that provide innovative compact detection with high quality and reliability.

The Company's quality policy applies to the development, manufacture, marketing and support of our products. In all its activities the Company is strongly focused on commitment to the requirements of our customers including:

- Management of risks to prevent operational and product problems that may adversely impact customer satisfaction and the interests of other parties.

- Management of any externally provided products and services to ensure that they meet specified requirements including changing needs.

To help management achieve its policy the business management system has been developed using a process approach including a Plan-Do-Check cycle, risk-based thinking, and a fundamental commitment to the continual improvement of the system and its effectiveness and integration into company activities.

The Company's Quality Management System is based on ISO9001: 2015. This standard puts more emphasis on risk management and management involvement within the quality management system.

Directors' indemnity and insurance

The Company has granted an indemnity to its Directors under which the Company indemnifies them, subject to the terms of the deed of indemnity, against all costs, charges, losses, damages and liabilities incurred by them in the performance of their duties. The Company also maintains insurance for its Directors and Officers against the consequences of actions brought against them in relation to their duties for the Company.

Related party transactions

The interests of the Directors are shown in the Directors' Report while their remuneration is detailed in the Directors' Remuneration Report. There were no other related party transactions involving the Directors. The only other related party is Parkwalk Advisors. Refer to Note 28 for further details.

Directors' responsibilities

The Directors are responsible for preparing the Annual Report and Accounts in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the Company financial statements in accordance with International Financial Reporting Standards (IFRSs), as adopted by the European Union and applicable law. Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Company and the profit or loss of the Company for that period.

In preparing the financial statements the Directors are required to:

- Select suitable accounting policies and then apply them consistently;
- Make judgements and accounting estimates that are reasonable and prudent; and
- State whether IFRSs as adopted by the European Union have been followed, subject to any material departures disclosed and explained in the financial statements.

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

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Statement of disclosure to auditors
So far as each Director is aware, there is no relevant audit information of which the Company's auditors are unaware. Additionally, the Directors have taken all the steps that they should have taken to make themselves aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

Auditors
Saffery Champness LLP has expressed its willingness to remain in office as auditors of the Company, and a resolution for its re-appointment will be proposed at the forthcoming Annual General Meeting.

Future Developments
An indication of likely future developments in the business of the Company is included in the Strategic Report.

This Directors' Report was approved by the Board of Directors on 8 March 2019 and signed on its behalf.

Glenn Tracey
Chief Executive Officer
Company number 03568010

DIRECTORS' REMUNERATION REPORT
For the year ended 31 December 2018

This report on the Directors' remuneration sets out the Company's policy on the remuneration of Executive and Non-Executive Directors, together with details of Directors' remuneration packages and service contracts.

Remuneration policy

The remuneration policy for Executive Directors, determination of their individual remuneration packages and their performance appraisals have been delegated to the Board's Remuneration Committee comprising three Non-Executive Directors and the Non-Executive Chairman.

Remuneration of the Executive Directors

In setting the remuneration for the Executive Directors, the Remuneration Committee considers several factors including:

- Basic salaries and benefits available to Executive Directors of comparable companies;
- Need to pay Executive Directors a competitive salary in line with the nature and complexity of their work;
- Need to attract and retain Executive Directors of an appropriate calibre;
- Need to ensure Executive Directors' commitment to the continued success of the Company by means of incentive schemes; and
- Need for the remuneration awarded to reflect performance.

The remuneration of the Executive Directors consists of basic salary, share options, life assurance and a contributory personal pension up to 7.5% of basic salary. A discretionary bonus scheme based on performance against individual and business objectives is operated by the Company. No bonus was awarded to the Executive Directors in 2018. The Executive Directors each decided to defer a potential July 2018 salary increase until the end of the year. With effect from 1 January 2019 the Executive Directors were awarded a 3% salary increase, in line with general inflationary increases awarded to staff in July 2018.

Remuneration of the Non-Executive Chairman and Non-Executive Directors

The Chairman of the Remuneration Committee discusses the remuneration of the Non-Executive Directors with the Executive Directors. The remuneration is then discussed and agreed by the Board (excluding Directors with a conflict of interest) following recommendation by the Remuneration Committee, having a view to rates paid in comparable organisations. The Non-Executive Directors do not receive any pension, bonus or other Company benefits. No share options have been issued to Non-Executive Directors, except for those issued to Peter Grant on his appointment as Non-Executive Chairman on 1 January, 2018. Chris Buckley was awarded options in 2016, prior to becoming a Director.

In 2018 the Chairman received an annual fee of £45,000 plus £2,000 per month for the first four months of his appointment in recognition of the extra time commitment expected during this period.

DIRECTORS' REMUNERATION REPORT
For the year ended 31 December 2018

In 2016, the Non-Executive Directors had voluntarily agreed to a reduction in base fees from £28,000 to £20,000 per annum, although in some cases additional amounts were payable if they worked extra days. This had been implemented to alleviate costs at a particularly challenging time for the Company. Based on a benchmarking report of AIM directors' remuneration across different sectors it was agreed that fees for Non-Executive Directors (excluding the Chairman) should be increased with effect from 1 July 2018 to the following:

- Base fee of £25,000 per annum; and
- Additional fee for chairing the Remuneration Committee £3,000 per annum.

Accordingly, the fees for Chris Buckley and Andrew Holmes were increased to £25,000 per annum and the fee for Eric Yeatman, as chair of the Remuneration Committee was increased to £28,000 per annum. These fees would cover all normal commitments of Non-Executive Directors and no additional fees would be payable based on time spent in fulfilling the Directors' duties.

Share options

It is the normal practice for the Company to award share options to Executive Directors. The award of additional options to Executive Directors, as well as to other employees, is reviewed annually by the Remuneration Committee. No award of options was made in 2017 but an award was made in January 2018 as set out below.

Directors' notice periods

Details of each Director's notice period as per their service contract are as follows:

	Contract date	Term	Notice period
Peter Grant	01-Jan-18	Indefinite	3 months
Glenn Tracey	01-Dec-15	Indefinite	6 months
Bevan Metcalf	18-Dec-15	Indefinite	3 months
Chris Buckley	01-Apr-16	Indefinite	3 months
Andrew Holmes	01-Apr-06	Indefinite	3 months
Eric Yeatman	01-Apr-06	Indefinite	3 months

Directors' emoluments

In 2018 Mr Tracey's basic salary was £122,000 per annum plus car allowance. Mr Metcalf, part-time Finance Director, had a basic salary of £86,000. Mr Metcalf worked additional days during the year when finalising the Annual Report and Accounts and during the fundraising for which he was paid a day rate. Non-cash payments represent life assurance premiums.

DIRECTORS' REMUNERATION REPORT
For the year ended 31 December 2018

	Salaries & fees	Non Cash Payments	Pension Contributions	Share-based payments	Year to 31 December 2018	Year to 31 December 2017
	£	£	£	£	£	£
Peter Grant[(1)]	53,000	-	-	25,560	78,560	-
Glenn Tracey	130,000	347	9,165	18,303	157,815	123,168
Bevan Metcalf	102,394	784	12,895	14,156	130,229	96,529
Chris Buckley	22,502	-	-	-	22,502	22,002
Andrew Holmes	22,500	-	-	-	22,500	20,000
Eric Yeatman	24,000	-	-	-	24,000	33,750
Other[(2)]	-	-	-	-	-	21,258
TOTAL	354,396	1,131	22,060	58,019	435,606	316,707

(1) Appointed 1 January 2018.
(2) Directors who left the Company in 2017.

Directors' share options

Share options over the Company's ordinary shares held by the Directors at the year end were as follows:

	At 1 January 2018	Granted in the year	Forfeited in the year	Exercised in the year	At 31 December 2018	Exercise price	Exercise period
	Number	Number	Number	Number	Number	Pence	
Peter Grant	-	3,500,000	-	-	3,500,000	4.05p	2 January 2018 – 2 January 2028
Glenn Tracey	100,000	-	-	-	100,000	47.75p	17 April 2015 - 17 April 2025
	200,000	-	-	-	200,000	23.5p	13 January 2016 - 13 January 2026
	1,000,000	-	-	-	1,000,000	5p	14 September 2016 - 14 September 2026
	-	1,000,000	-	-	1,000,000	4.05p	2 January 2018 – 2 January 2028
Bevan Metcalf	120,000	-	-	-	120,000	23.5p	13 January 2016 - 13 January 2026
	1,000,000	-	-	-	1,000,000	5p	14 September 2016 - 14 September 2026
	-	1,000,000	-	-	1,000,000	4.05p	2 January 2018 – 2 January 2028
Chris Buckley	75,000		-	-	75,000	23.5p	13 January 2016 - 13 January 2026
Total	2,495,000	5,500,000	-	-	7,995,000		

DIRECTORS' REMUNERATION REPORT
For the year ended 31 December 2018

5.5m options were awarded to Directors in January 2018 as detailed in the table above at an exercise price of 4.05p. These share options are subject to a three-year service condition plus performance conditions.

The share price at the start of 2018 was 4.29p and at the end of 2018 was 0.90p, with a high and low over the year of 4.29p and 0.85p respectively.

The share-based payment charge for the Directors during the year was £58,019 (2017: £21,220). No share options were awarded to Directors in 2017.

The Directors' Remuneration Report was approved by the Board of Directors on 8 March 2019 and signed on its behalf by:

Eric Yeatman
Chairman of the Remuneration Committee

DIRECTORS' FINANCE & AUDIT COMMITTEE REPORT
For the year ended 31 December 2018

Introduction

This report details how the Finance & Audit Committee ("the Committee") has met its responsibilities under its terms of reference. The Committee is a sub-committee of the board. As Non-Executive Directors, the members of the Committee are, together with the Company Secretary, guardians of the conscience of the Company. The work of the Committee should support the creation of long-term value for shareholders.

It is fundamental that the Committee continues to act as an oversight sub-committee of the board, considering and challenging and not itself performing the relevant processes. The ultimate responsibility for reviewing and approving the Annual Report and Accounts and interim financial statements remains with the Board.

The Committee does not believe there is a requirement for an internal audit function at this point in time due to the Company's size and level of complexity.

Role and Responsibilities

The Board has established a Finance & Audit Committee to monitor the integrity of the Company's financial statements and the effectiveness of the Company's internal financial controls. The Committee's role and responsibilities are set out in the terms of reference which are available from the Company's website (http://www.microsaic.com/investors/governance-new/ - refer to Principle 9). The Terms of Reference are reviewed annually and amended where appropriate. During the year the Committee worked with management, the external auditors, and other members of the senior management team in fulfilling these responsibilities.

The Committee report deals with the key areas in which it plays an active role and has responsibility. These areas are as follows:

i. Financial Reporting and related primary areas of judgement;
ii. The External Audit process;
iii. Risk Management and Internal controls; and
iv. Whistleblowing procedures.

Annual Report and Accounts

General

The Committee has satisfied itself that the 2018 Annual Report and Accounts have been prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union, are fair, balanced and provide the information necessary for shareholders to assess the Company's performance, business model and strategy. The Committee reviewed the key risk areas as identified in the Audit Strategy document including: revenue recognition; going concern; management override of controls; treatment of share options; impairment of intangible assets; use of accounting estimates; and valuation of stock. The Committee understand that the auditors have followed their procedures for reviewing these risks and have undertaken detailed testing as appropriate. In addition, the Committee has also considered the key audit matter(s) affecting the Company and any material misstatement arising. The key audit matter for 2018 is the valuation of stock. At the year end the Company undertook stocktakes at its two sites. At the end of 2019 all stock will have been transferred to our manufacturing partner. The carrying value of stock included at 31 December 2018 was £401,945. In assessing the carrying value the Directors considered obsolete and slow-moving items and created a stock provision of £66,808 to reflect this.

Going Concern

The Committee reviewed the going concern paper prepared by management including detailed financial forecast by month for the period 2019 to 2021, related assumptions/goals, risks and opportunities, sensitivities, and areas for mitigation. The Committee was satisfied that the estimates of future performance were reasonable. Progress will be monitored closely during 2019 and if forecasts are not achieved contingency plans have been identified which could be implemented.

Internal Control Systems

Another key responsibility of the Committee is to review the Company's internal control systems, including internal financial controls. During the year, the Committee mandated the Finance Director to review and update the Company's Financial Procedures Manual. This is an important reference document which is used by the Management Team for controlling and authorising expenditure, not to mention providing transparency around the Company's financial procedures and controls. This document was reviewed and signed off at the January 2019 Board Meeting.

The Committee also asked the Finance Director to obtain advice on the treatment of travel expenses for Non-Executive Directors. The Finance Director asked our external accountants, Menzies LLP for advice on this point and to undertake a wider review of PAYE compliance. The review identified that:

1. Non-Executive Directors spent less than 40% of their time working at the Company's premises and, therefore, the Company asked HMRC to confirm that the travel costs to Board meetings may be reclaimed as business travel and are not subject to PAYE;
2. Entertaining expenditure was reviewed over the past six years. Certain expenses were identified which management believe would attract an additional PAYE/NI liability of £2,757 before interest. An accrual for this amount is included in the financial statements. The Company made an unprompted disclosure to HMRC that it would like to meet this liability on behalf of its employees by way of a Section 6 informal settlement; and
3. A proportion of the fees payable to a non-resident Non-Executive Director should have been subject to PAYE. Management believe such UK income will be off-set by the Director's personal allowance and no tax would be due. The Company has advised HMRC and has asked for their agreement that relief under Section 690 can be given.

The Company's accountants wrote on behalf of the Company to HMRC on the above points on 30 November 2018. The Company has not yet received a response from HMRC.

DIRECTORS' FINANCE & AUDIT COMMITTEE REPORT
For the year ended 31 December 2018

Risk Management
The risks facing the Company were reviewed during the fundraise process in May 2018 for inclusion in the Circular to shareholders and during the budget process in November 2018. The main risks facing the business are highlighted in the Strategic Report and Directors' Report.

One of the key risks identified during the risk review was the Company's dependence on a key partner in bioprocessing. The collaboration with this partner was terminated in December 2018. During H1 2018 the Company implemented mitigating actions in case of such an eventuality occurring which included developing its own data to show prospective new bioprocessing partners the benefits of its detection instruments when dealing with large molecules. Since this event the Company has continued a dialogue with other prospective bioprocessing partners, and although these discussions are at an early stage the Company is hopeful of securing a new partner during 2019.

Committee Meetings
The Committee met three times in the year to 31 December 2018. Two meetings related to the 2017 Annual Report and Accounts, one of which was attended by the external auditors. The other meeting was to review and sign off the 2018 Interim Financial Statements which involved the full board.

The members of the Finance & Audit Committee are Andrew Holmes, Chris Buckley, Eric Yeatman and Peter Grant. Mr Grant took over the chairmanship on joining the Company in January 2018. Mr Grant has relevant experience as a member and Chairman of the Audit Committees of other Boards. The Board considers that the Committee has an appropriate and experienced blend of commercial, financial and industry expertise to enable it to fulfil its duties, and that the committee chairman, Peter Grant, a Chartered Accountant, has appropriate recent and relevant financial experience.

Board Conduct and Effectiveness Review
The review was undertaken by the Board in January 2019 and involved each Director completing a questionnaire. The results were anonymised and collated by an independent person. As part of this exercise the effectiveness of the Finance & Audit Committee was reviewed. On a scale of 1 to 5, with 5 being strongly agree the Board ranked the Committee as follows:

The Finance and Audit Committee gives appropriate attention to:	
Regulatory compliance	4.3
Financial controls	4.3
Risk management	3.8
Audit processes	4.5

After discussion and reflection, the Board agreed that more detailed attention should be given to risk management. Therefore, the Board has asked management to undertake a detailed review of risks facing the business for presentation to the Board and the Committee in H1 2019.

DIRECTORS' FINANCE & AUDIT COMMITTEE REPORT
For the year ended 31 December 2018

Finance & Audit Committee Activities	July/Aug	Oct	Dec/Jan	Feb/Mar
Financial Reporting				
Review and approve interim results	x			
Consider key audit and accounting issues and judgements				x
Consider key audit risks				x
Consider accounting policies and the impact of new accounting standards				x
Review any related party matters and intended disclosures				x
Review management letter from auditors				x
Approve going concern statement				x
Review Annual Report, and confirm if fair balanced and understandable				x
External auditors				
Plan for year-end audit			x	
Confirm auditor independence, materiality of fees, and non-audit services			x	
Approval of audit engagement letter and audit fees			x	
Risk management controls				
Assess effectiveness of internal control systems - financial reporting manual		x	x	
Monitor Group whistleblowing procedures				x
Assessment of the principal risks				x
Governance (involves the whole Board)				
Corporate governance report				x

Auditors Fees and Non-Audit Services

The Committee reviewed the estimated fee proposed by the Auditors in the Audit Strategy document of £19,450. This is an increase of 5.9% over 2017 (excluding tax return preparation and advisory work). Other advisory fees incurred during the year amounted to £3,310. A detailed breakdown is detailed below:

1. Review of 2018 interims - £1,950;
2. Share option scheme HMRC online reporting advice - £525;
3. Advice on share options and share issue costs - £650; and
4. Correspondence with HMRC regarding R&D tax credit claim - £185.

In addition to the above, the tax department of our auditors reviews the corporation tax computation and related disclosure notes in the Annual Report and Accounts and prepares the annual corporation tax return. The fee included in 2018 for the provision of this service is £5,500.

Auditor Independence
Lucy Brennan, Partner at Saffery Champness LLP advised the committee at the meeting held on 19 February 2018 that last year's audit would be her last having been partner in charge for the past five years. The Committee satisfied itself on the auditors' independence with the appointment of Mr Roger Weston, as partner in charge.

Whistleblowing
The Committee had no whistleblowing incidents reported directly or indirectly during 2018.

The Report of the Finance & Audit Committee was approved by the Board of Directors on 8 March 2019 and signed on its behalf by:

Peter Grant
Chairman of the Finance & Audit Committee

CORPORATE GOVERNANCE REPORT
For the year ended 31 December 2018

Chairman's corporate governance statement (extract)
The full corporate governance statement is published and maintained up to date on the Company's website at (http://www.microsaic.com/investors/governance-new). This extract from that statement is included in the Annual Report & Accounts as required by the Quoted Companies Alliance's (QCA) Corporate Governance Code for small and mid-size quoted companies (the "Code").

The Board is committed to maintaining high standards of corporate governance and, with effect from 26th September 2018, the Board has adopted the Code.

The Code was revised in April 2018 to meet the new requirements of AIM Rule 26 and sets out ten broad principles of corporate governance. It states what are considered to be appropriate corporate governance arrangements for growing companies and requires companies to provide an explanation about how they are meeting the principles through certain prescribed disclosures.

The Chairman leads the Board and is responsible for its overall effectiveness in directing the Company. He manages the Board agenda and ensures that all Directors receive accurate, timely and clear information and effectively contribute their various talents and experience in the development and implementation of the Company's strategy. He ensures that the nature and extent of the significant risks the Company is willing to embrace in the implementation of its strategy are challenged and determined by the Board. The Chairman is responsible for ensuring that the Board implements, maintains and communicates effective corporate governance processes and for promoting a culture of openness and debate designed to foster a positive governance culture throughout the Company.

The Board has considered how each principle is applied and provides below an explanation of the approach taken in relation to each principle and how they support the Company's medium to long-term success.

In January 2018 the Board introduced a rolling Board agenda plan to ensure that all matters which the Board should consider each year are addressed. This allows for presentations from senior management so that the Board benefits from wider input than the Executive Directors.

The Company had not previously included a Finance & Audit Committee Report in its Annual Report and Accounts but is doing so in this Annual Report and Accounts.

The Board carried out a formal review of its effectiveness for the first time in January 2019, which is reported on below under Principle 7.

The Board considers that it does not depart from any of the principles of the Code.

CORPORATE GOVERNANCE REPORT
For the year ended 31 December 2018

PRINCIPLES TO DELIVER GROWTH

PRINCIPLE 1: Establish a strategy and business model which promote long-term value for shareholders.

Strategy:
Microsaic's strategic aim is to capitalise on its strengths in point of need MS detection, and access high-growth and emerging life science applications. The Company intends to achieve its strategy with a business model built on customer focus and technology innovation.

Business Model:
The Company's business model is described on page 8 of the Strategic Report.

Challenges:

Staying relevant with future customer needs
Customer needs evolve rapidly. Future product specifications will be driven by end-user requirements. This will inform Microsaic's product strategy as its MS Detectors move from the laboratory into production, and front-line operating environments. Microsaic will ensure that its strategic product development will remain focused on meeting demanding bioprocessing applications.

Building partnerships over the long-term will establish greater competitive advantage for the Company, as its products are tailored to specific application needs.

Remaining innovative in an advancing technological landscape
Microsaic has successfully developed and implemented advanced technology at the core of its design with over 60 patents to date. This has led to a solid foundation serving scientists in the laboratory in small molecule drug discovery.

The Company continues to invest in several product development projects with its core MiD® MS Detector platform, which the Board believes will be attractive to the growing market for laboratory-based applications with larger biological molecules, such as peptides and small proteins.

In the longer-term, the Company will extend its product capabilities further into life science applications, such as bioprocessing, where a range of biological entities, including monoclonal antibodies, can be analysed by direct analysis in minutes. This compares with traditional analysis in remote centralised laboratories sometimes taking many days or even weeks to deliver results.

PRINCIPLE 2: Seek to understand and meet shareholder needs and expectations. See the website for further disclosures concerning how the Company seeks to engage with shareholders and how successful this has been.

CORPORATE GOVERNANCE REPORT
For the year ended 31 December 2018

PRINCIPLE 3: Take into account wider stakeholder and social responsibilities and their implications for long-term success. See the website for further disclosures.

PRINCIPLE 4: Embed effective risk management, considering both opportunities and threats, throughout the organisation.

The Board aims to ensure that the Company's risk management framework identifies and addresses all relevant risks in order to execute and deliver the strategy.

The Directors recognise their responsibility for the Company's systems of internal control and have established systems to ensure that an appropriate and reasonable level of oversight and control is provided. The Company's systems of internal control are designed to help the Company meet its business objectives by appropriately managing, rather than eliminating, the risks to those objectives. The controls can only provide reasonable, not absolute, assurance against material misstatement or loss.

The Company's Management Team, which reports into the Executive, meets with the Executive at least quarterly to review commercial, operational and financial risks facing the business. These risks are assessed according to their nature and magnitude and given a score based on the seriousness of the risk and the likelihood of the risk occurring. The effectiveness of the controls implemented to minimise the risks are also reviewed. The aim of these reviews is to provide reasonable assurance that material risks are identified and appropriate action is taken at an early stage. From this review the Company maintains its internal risk register which on an annual basis is reviewed and updated by the Finance & Audit Committee and the Board. New material risks which arise in the meantime, such as the potential effect of Brexit, are added to the risk register and discussed at Board level as they arise.

The Company has also implemented a system called PACE (Product and Cycle Time Excellence) as a key part of its evaluation and monitoring of R&D projects. PACE identifies the risks facing each of the Company's projects and how to mitigate each risk.

The annual budget is reviewed and approved by the Board. Financial results, with comparisons to budget, and latest forecasts are reported on a monthly basis to the Board together with a report on operational achievements, objectives and issues encountered. Significant variances from plan are discussed at Board meetings and actions set in place to address them.

Measures continue to be taken to review and improve internal controls and risk management procedures. In 2017 the Company implemented a Financial Procedures Manual including approval levels for authorisation of expenditure, potential fraud scenarios, payment approval process, expenses guidelines etc. This was last updated and approved by the Board in January 2019.

The Company's auditors are encouraged to raise comments on internal control in their management letter following the annual audit. The points raised and actions arising are monitored through to completion by the Finance & Audit Committee.

CORPORATE GOVERNANCE REPORT
For the year ended 31 December 2018

PRINCIPLES TO MAINTAIN A DYNAMIC MANAGEMENT FRAMEWORK

PRINCIPLE 5: Maintain the Board as a well-functioning, balanced team led by the Chair.

The Board currently consists of two executive and four Non-Executive Directors. The Board met monthly during 2018 but has revised its schedule to meet about eight times in 2019.

The Company has an equal opportunity policy to recruitment at Board level and within the Company at large and seeks diversity as opportunities arise, within the framework of selecting the most suitable person, based on relevant skills, abilities, experience and location, as required for the role.

The principal role of the Chairman of the Board is to manage and provide leadership to the Board of Directors of the Company. The Chairman is accountable to the Board and acts as a direct liaison between the Board and the management of the Company, through the Chief Executive Officer. The Chairman acts as the communicator for Board decisions where appropriate.

The Chairman is independent from management and free from any business or other relationship which could interfere with his independent judgment.

The Chairman is responsible for the effective leadership, operation and governance of the Board and its Committees. He ensures that all Directors contribute effectively to the development and implementation of the Company's strategy, while ensuring that the nature and extent of the significant risks the Company is willing to embrace in the implementation of its strategy are determined and challenged.

The Chief Executive Officer is responsible for the management of the Company, providing executive leadership and for implementing the Company's strategy.

The Chairman was considered independent upon his appointment in January 2018. The Board believes that the advice, behaviour and character of its other Non-Executive Directors (Messrs Yeatman, Holmes and Buckley) is independent and at all times in the best interests of the Company and its shareholders. In addition, the skills and business judgement which they possess and regularly exercise contributes to the efficient and effective running of the Company. The Company's Senior Independent Director is Mr Eric Yeatman.

The Company appreciates that circumstances which might, or might appear to affect a Director's judgement may well include financial dependence on the Company and whether the Director is, or represents, a major shareholder. None of the Non-Executive Directors or Non-Executive Chairman are financially dependent on the Company as they all have other jobs in either industry or academia. In addition, none of the Non-Executive Directors has a significant shareholding defined as greater than 3% in the Company, or represents a significant shareholder.

Under the QCA Guidelines the independence of the Chairman and Non-Executive Directors could be challenged under the following areas, but in all cases the Board believes that all the Non-

Executive Directors act in an independent manner at all times:

Name and position	**Potential issue**	**Why independence not compromised**
Peter Grant Non-Executive Chairman	Holds 3.5m share options in the Company. This was a one-off award when Mr Grant joined the Company in January 2018 and is subject to objective performance conditions which are aligned with the Executive Directors. Chairs the Finance & Audit Committee.	This was a one-off award granted, following consultation with a major shareholder, and was required to attract a Chairman of the appropriate calibre to the Company. The performance conditions are objective, based on tangible progress by the Company, and the vesting of options will be managed by the Non-Executive Directors without input from the Chairman as regards his options. Peter is Chair of the Finance & Audit Committee in view of his qualification as a Chartered Accountant (FCA) and has relevant experience as a Finance Director and as Audit Committee Chairman on various listed companies.
Chris Buckley Non-Executive Director	Briefly held the position of VP Marketing prior to becoming a Non-Executive Director. Holds 75k options in the Company. These were awarded prior to Mr Buckley taking up his role as Non-Executive Director.	Chris's short tenure as VP Marketing has not compromised his effective independence as a Non-Executive Director. The number and potential value of options is relatively small in relation to Chris' full time earnings, and were awarded in the context of work prior to being a Non-Executive Director.

Name and position	Potential issue	Why independence not compromised
Andrew Holmes Non-Executive Director	Currently holds the position of Company Secretary.	Being Company Secretary does not affect his independence. The Board believes that the Company is too small to justify the expense of a separate Company Secretary. Bevan Metcalf, Finance Director, will take on the additional responsibilities of Company Secretary from 14 May 2019 when Andrew resigns from the Board.
	As a founder, has been on the Board for over 9 years.	As a Professor at Imperial College, London, Andrew brings technical knowledge to the Board which is useful for a small business.
Eric Yeatman Non-Executive Director	Has previously held the position of Chief Executive Officer on an interim basis.	Eric stepped into the role of Chief Executive Officer on an interim basis when a vacancy arose; but notwithstanding this, at all times acts as an independent Non-Executive Director.
	As a founder, has been on the Board for over 9 years.	As a Professor at Imperial College, London, Eric brings technical knowledge to the Board which is useful for a small business.

The Board has an established Finance & Audit Committee and Remuneration Committee. The Company believes it is currently too small to have a separate Nominations Committee, so this role is taken on by the Board of Directors as a whole.

Details and links to the terms of reference of the Finance & Audit Committee and Remuneration Committee are set out under Principle 9 below.

Details of Directors and their time commitment is set out under Principle 6 below.

The number of board and committee meetings and attendance records of Directors is set out under Principle 9 below.

PRINCIPLE 6: Ensure that between them the Directors have the necessary up-to-date experience, skills and capabilities.

Biographical details of the Board of Directors, their skills, suitability and availability are set out below:

CORPORATE GOVERNANCE REPORT
For the year ended 31 December 2018

Peter Grant, Independent Chairman
Term of office: Appointed Non-Executive Chairman on 1 January 2018. Peter's most recent re-election as Director was on 4 May 2018 at the Company's AGM, when he retired per Article 81.1 (a) of the Articles of Association.

Peter chairs the Finance & Audit Committee and is a member of the Remuneration Committee of the Company.

Background and suitability for the role: Peter Grant had an executive career spanning 40 years, nearly half at listed company board level spanning the healthcare, electronics, software and engineering industries. His executive career included CEO of Skyepharma PLC, CFO of Skyepharma PLC, Group Finance Director at Eurodis Electron PLC, CFO at WorldPay Group plc, Group Chief Executive at Molins PLC and Finance Director at Molins PLC. Prior to this he held a variety of senior commercial, financial and general management roles in the General Electric Company PLC group of companies. He holds an MA in Mathematics from the University of Oxford and is a Chartered Accountant. He brings a combination of listed company and financial expertise, experience of developing, manufacturing and distributing electronic and software products and experience of the healthcare sector.

Current external appointments: Peter is Chairman and Chair of the Audit and Nomination Committees and member of the Remuneration Committee of LiDCO Group plc, and a Non-Executive Director of Labatec Pharma SA, a private Swiss company. Peter estimates that his current appointments, including that with the Company, comprise about 8 days a month, and he considers that he would have the time to be able to step up the commitment to the Company should temporary circumstances require him to do so. Peter keeps his skills up to date by regularly reading various publications on changes in regulations and the business environment affecting companies, especially in the healthcare sector.

Glenn Tracey, Chief Executive Officer
Term of office: Joined March 2015 as Chief Operating Officer. Appointed to the Board in December 2015, and appointed as Chief Executive Officer in September 2017. Glenn's most recent re-election as Director was on 20 June 2016 at the Company's AGM, when he retired per Article 81.1 (a) of the Articles of Association.

Background and suitability for the role: Glenn has more than 20 years' experience leading operations, marketing and high technology collaboration, and research and development for small and large companies in sensing and detection instrumentation, across applications in human and environmental health. Glenn specialises in scaling new technology into emerging markets, especially transitioning contemporary high-end detection laboratory technologies to point of need or field-based sensing across a number of markets such as food, air, water and pharmaceuticals.

Glenn holds a BSc in Applied Chemistry from Salford University, and an MBA from the Open University.

Glenn has no external appointments.

Bevan Metcalf, Part-time Finance Director
Term of office: Appointed to the role of Part-time Finance Director on 18 December 2015. Bevan Metcalf is employed for 13 days per month. Any additional days are paid on an agreed day rate on a quarterly basis. Bevan Metcalf has the flexibility to increase his time during busy periods as Microsaic is his only role. Bevan's most recent re-appointment as a Director of the Company was on 4 May 2018, at the Company's AGM, when he retired per Article 81.1 (c) of the Articles of Association.

Background and suitability for the role: Bevan has a Business Management Degree from the University of Waikato, Hamilton, New Zealand where he majored in Accounting. He is also an ACA Member of the Chartered Accountants of Australia and New Zealand.

Bevan has 40 years' of financial management experience with international companies primarily in the mining and pharmaceuticals sectors, including Beowulf Mining, Afferro Mining, African Eagle Resources, Orion Corporation, GlaxoSmithKline, Charles Parsons Ltd and ICI. In the past 14 years he has been involved with companies listed on the AIM market of the London Stock Exchange and on the Toronto Stock Exchange as Finance Director, Company Secretary, Chief Financial Officer and in a Non-Executive Director capacity. He therefore understands the Governance and MAR regulations impacting the Company.

Bevan's 20 years' experience in the pharmaceutical industry is very relevant to the strategy of the Company which is targeting the pharmaceutical industry for its miniaturised mass spectrometers.

Bevan keeps his accounting skills up to date through his membership of the Chartered Accountants of Australia and New Zealand where he accesses their library of resources and receives journals and other reading materials on a regular basis.

Bevan has no external appointments.

Professor Eric Yeatman, Non-Executive Director
Term of office: Director since the foundation of the Company in 2001. Non-Executive Director during this period except:

- Chairman: 2004 - December 2011;
- Interim Chief Executive Officer: December 2011 - November 2012;
- Chairman: November 2012 - June 2013; and
- Interim Chairman: February 2017 - December 2017.

Eric is also Chairman of the Remuneration Committee since 1 January 2018, and has previously chaired the Finance & Audit Committee. His most recent re-election as Director was on 20 June 2016 at the Company's AGM, when he retired per Article 81.1 (c) of the Articles of Association.

Background and suitability for the role: Eric Yeatman has been an active researcher in micro-technology, on which the Company's unique products are based, since 1986. He obtained his PhD in 1989 and has since been a member of academic staff of Imperial College London, one of the world's top 20 universities, becoming full Professor in 2005. He has published over 200 papers in related fields, with over 8,000 citations, and is inventor or co-inventor on 10 patents. As a co-founder, he is intimately familiar with the evolution of the Company and its technology. He has served on the advisory boards of two venture capital funds and one high technology company. He is a Fellow of the Royal Academy of Engineering, and was awarded its Silver Medal in 2011, given "*to recognise an outstanding and demonstrated personal contribution to British engineering*".

Current external appointments: Prof. Yeatman is Head of the Department of Electrical and Electronic Engineering of Imperial College London. He is a member of the Enterprise Committee of the Royal Academy of Engineering. He serves on a number of advisory committees and boards of international technical conferences and journals. These other commitments do not prevent him spending whatever time is needed to fully exercise his duties and responsibilities as a Non-Executive Director of the Company, and none creates a conflict of interest with, or imposes a relevant restriction on, his duties to the Company.

Chris Buckley, Non-Executive Director
Term of office: Appointed Director in April 2016. Chris is also a member of the Finance & Audit Committee and the Remuneration Committee. Chris' most recent re-election as Director was on 20 June 2016, at the Company's AGM, when he retired per Article 81.1 (a) of the Articles of Association.

Background and suitability for the role: Chris Buckley has 35 years of experience in the global healthcare industry, spanning international marketing and general management assignments. He has a proven track record of translating scientific innovations into competitive customer-focussed benefits. Chris holds a degree in pharmacology and biology from the University of Aston, UK.

Chris spent 27 years of his career with Novartis, predominantly in the Consumer Healthcare and Pharma divisions, where he progressed through a variety of local, regional and global roles. He brings to Microsaic, a wealth of strategic management experience, coupled with the pragmatic and commercial expertise to effectively grow brands.

Current external appointment: Chris is employed by Quotient SA, a diagnostics company in the global blood transfusion market, where he is appointed to the role of Head of Marketing and Value Creation.

Chris's experience in the pharmaceutical and in-vitro diagnostics Industries is very relevant to Microsaic's strategy, since the Company is targeting the pharmaceutical industry for its miniaturised mass spectrometers.

Chris keeps his commercial skills up to date through his role as Head of Marketing and Value Creation for Quotient SA. He is also a Fellow of the Chartered Institute of Marketing (FCIM), where he has access to a marketing resource library and marketing training programmes.

CORPORATE GOVERNANCE REPORT
For the year ended 31 December 2018

Professor Andrew Holmes, Non-Executive Director and Company Secretary
Term of office: Director since the foundation of the Company in 2001. Andrew is also a member of the Finance & Audit Committee and the Remuneration Committee. Andrew's most recent re-election as Director was on 15 May 2017, at the Company's AGM, when he retired per Article 81.1 (c) of the Articles of Association.

As Company Secretary Andrew takes the minutes at Board and General Meetings, ensures compliance with the Companies Act, ensures that all filings are submitted to Companies House on time, and that the statutory books and records of the Company are maintained. As noted previously the role of Company Secretary will transfer to the Finance Director when Andrew leaves the Company at the forthcoming AGM.

Background and suitability for the role: Andrew is Professor of Microelectromechanical Systems (MEMS) at Imperial College London. He holds a BA degree in natural sciences from Cambridge University, and a PhD degree in electrical engineering from Imperial College London. He has been an active researcher in micro-technology since 1987 and has published over 160 papers in this and related fields. He also has extensive experience of analogue and mixed signal electronic circuit design through industrial consultancy work over the past 30 years. He has acted as a technical adviser to the Company since its foundation, and has made key contributions to the development of both the core technology and its associated electronics. Andrew keeps his skills up to date by reading relevant technical publications and attending conferences. He is a Fellow of the IET.

Current external appointments: Andrew is Director of Postgraduate Studies and Deputy Head of the Optical & Semiconductor Devices Group in the Department of Electrical and Electronic Engineering Department at Imperial College London. He is an editor of the IEEE Journal of Microelectromechanical Systems (JMEMS) and a founding member of the MEMS Technical Coordination Committee within the IEEE Industrial Electronics Society. He also serves on the technical program committees of several international conferences. None of these commitments creates a conflict of interest with his duties to the Company.

The Company from time to time uses external advisers.
During 2018, The Board has retained the following advisers:

- PhilipHare and Associates for advice on the handling of Venture Capital Trusts (VCT) and Enterprise Investment Schemes (EIS) during the Company's fundraise in June 2018;
- N+1 Singer is Broker, NOMAD and corporate financial adviser on an ongoing basis, and for specific advice during the Company's fundraise in June 2018;
- Dorsey & Whitney (Europe) LLP for general legal advice and specific advice during the Company's fundraise in June 2018; and
- Menzies LLP for ongoing advice on NED remuneration, VAT and PAYE treatment.

PRINCIPLE 7: Evaluate Board performance based on clear and relevant objectives, seeking continuous improvement.

Board Evaluation Process

The Board believes that, in addition to dealing with any matters as they arise, it is appropriate to carry out a formal evaluation of the performance of the Board each year. This is intended to ensure that the Board remains effective, well-informed and able to make high quality and timely decisions for the benefit of all stakeholders in the Company.

The first such evaluation was carried out in January 2019. This involved each Director completing an evaluation questionnaire which covered effectiveness from multiple angles including: Board structure and committees; Board arrangements, frequency and time; content of Board meetings; Board culture; Board evaluation and succession; and individual contributions. The completed questionnaires were anonymised and collated independently into a summary, and comments and any areas of concern were highlighted for discussion with the Board.

Generally, the evaluation confirmed that the Board was effective, the culture is constructive and arrangements for Board meetings were good. The evaluation process was felt to be useful and effective. The evaluation identified the following areas for further consideration:

Area for consideration	Outcome
Board and committee structure and composition	
The Board would benefit from having an NED with complementary skills, especially good contacts/knowledge of the Company's target markets.	The Board decided to consider this further with a view to looking out for a potential NED with the right complementarity skills.
Currently the entire Board deals with Nomination matters and there is no Nomination Committee.	The Board feels this is currently appropriate for a company of this size. This will be kept under review, especially if there is a recruitment process to oversee.
Although one meeting a year is largely dedicated to strategy, the Board could spend more time discussing strategic matters at routine meetings.	The rolling agenda will be updated to allow for this, as well as giving more time to the review of R&D plans and outcomes.
A more formal process could be introduced for the evaluation of risks.	This will be implemented in 2019.

Succession Planning

As is common with many small AIM listed companies, the Company does not have internal candidates to succeed existing Executive Directors. This will be kept under review, especially when recruiting for senior roles as vacancies arise. However, the Board does not believe it is appropriate to recruit additional Directors or senior personnel solely for the purpose of board succession planning.

Training of Directors
It is recognised that there continues to be more regulation of which Directors need to be aware. The Board will continue to ensure that Directors receive appropriate support to keep up to date. In 2017 the Chief Executive Officer completed an Institute of Directors course in Company Direction.

In 2018 the Chief Executive Officer undertook one to one Executive Coaching and as part of that coaching anonymised feedback was taken from key stakeholders which in turn was discussed with the Chief Executive Officer.

PRINCIPLE 8: Promote a culture that is based on ethical values and behaviours.

The Company is committed to achieving the highest possible ethical standards in conducting its business. The Company expects all employees and Directors to maintain the same high standards. To achieve these ends, Microsaic encourages freedom of expression and speech.

Ethics is based on a set of principles and clear moral and ethical values. The Company takes its principles and values very seriously and when all else fails, expects staff at all levels to look to these principles and values for guidance.

The Company is in the process of implementing an ethical value system and discussing its principles and core values with its employees.

Principles:

The Board has adopted the following four principles:

1. Management must lead by example. Good ethics should be most noticeable at the top. Every employee must be accountable to the same rules.
2. Corporate values must be implemented throughout the Company. Every forum and medium should be used to spread the message and, most of all, the Company must practice what it preaches.
3. Meetings with staff (both one on one and group) to discuss the values and what they mean to each employee must be undertaken when implementing a value system. This will help to get everyone in the Company on the same page and committed.
4. The values of the Company must endure changes in leadership. The longer ethical values last, the more ingrained they will become.

Values

The Company conducts its business around 7 core values:

1. *Integrity – applying high ethical standards and being honest.* The old adage, “honesty is the best policy” is true today more than ever. The Company will conduct its business with honesty to all stakeholders and will uphold high moral principles.

2. *Mutual respect, empathy and trust in dealing with others*. An environment of mutual respect, empathy and trust is necessary if a Company is to promote integrity. Trust in the workplace is critical to organizational success. You cannot optimize results by yourself; you need others' support and assistance. Trust is something that must be gained over time. We are not "entitled" to others' trust; we have to earn it. Respect is a term that defines the feeling of holding a company or person in high esteem.
3. *Innovation – a passion to experiment and deliver new solutions*. A focus on research and development is extremely important to the future success of the Company. The Company is looking to introduce new technologies, products, processes or upgrades that are designed to achieve both product differentiation and lower costs while at the same time delivering innovative solutions to meet customer needs.
4. *Teamwork – drives high performance.* As a small Company, Microsaic relies heavily on team work. No one person is bigger than the Company. A team approach is more efficient, faster, benefits from multi-skills especially in problem solving, increases learning opportunities and encourages a sense of belonging, which often translates to a greater sense of ownership and accountability for the work. The teams' communication principles are to listen effectively and deliver; open, clear, complete, consistent and timely communication.
5. *Quality – we take pride in everything we do*. The Company is strongly focused on quality from the products it produces to the processes it operates. The Company has recently transitioned to ISO9001-2015. Focusing on the quality of our people, products and services will ultimately create a quality image for the Company.
6. *Customer focus – go the extra mile for our customers.* The Company assigns highest priority to customer satisfaction. We listen to our customers' needs and create solutions for unmet customer needs.
7. *Shareholder value – striving to deliver value to shareholders*. The key objective of the Company is achieving sustainable profitability. Every employee should understand how he or she fits into the profitability picture. Everyone's common goal should be to build a strong, profitable Company that will endure and provide reasonable returns to shareholders.

PRINCIPLE 9: Maintain governance structures and processes that are fit for purpose and support good decision-making by the Board. See the website for further disclosures.

In 2018 the Board of Directors held 12 regular meetings together with a number of additional meetings to handle the fundraising. The agenda for Board meetings is prepared by the Executive Directors (following an established framework) and agreed with the Chairman.

The attendance of the Directors at the regular Board Meetings and Committee Meetings during the year ended 31 December 2018 were as follows:

CORPORATE GOVERNANCE REPORT

For the year ended 31 December 2018

Name	Position	Regular Board Meetings	Finance & Audit Committee	Remuneration Committee
Peter Grant	Non-Executive Chairman	12 (12)	3 (3)	2 (2)
Glenn Tracey	Chief Executive Officer	12 (12)	n/a	n/a
Bevan Metcalf	Finance Director	12 (12)	n/a	n/a
Chris Buckley	Non-Executive Director	12 (12)	3 (3)	2 (2)
Andrew Holmes	Non-Executive Director	11 (12)	3 (3)	2 (2)
Eric Yeatman	Non-Executive Director	12 (12)	3 (3)	2 (2)

Numbers in brackets denote the total number of meetings that each Director was eligible to attend during the year.

PRINCIPLE 10: Communicate how the Company is governed and is performing by maintaining a dialogue with shareholders and other relevant stakeholders.

The following Committee reports are included in these Annual Report & Accounts as shown below. They include details of the work of those committees.

- The Directors' Remuneration Committee Report - pages 22 to 25; and
- The Directors' Finance & Audit Committee Report - pages 26 to 30.

See the website for further disclosures.

The Corporate Governance Report was approved by the Board of Directors on 8 March 2019 and signed on its behalf by:

Peter Grant
Non-Executive Chairman

INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF MICROSAIC SYSTEMS PLC
For the year ended 31 December 2018

Opinion

We have audited the financial statements of Microsaic Systems Plc for the year ended 31 December 2018 which comprise the Statement of Comprehensive Income, the Statement of Financial Position, the Statement of Changes in Equity, the Statement of Cash flows and notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union.

In our opinion, the financial statements:

- Gives a true and fair view of the state of affairs of the Company as at 31 December 2018 and of its loss for the period then ended;
- Have been properly prepared in accordance with IFRSs as adopted by the European Union; and
- Have been prepared in accordance with the requirements of the Companies Act 2006; Article 4 of the IAS Regulation.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

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

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

Key audit matters

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

Key audit matter	How our audit addressed the key audit matter
Carrying value of stock The carrying value of stock included in the Company's balance sheet at 31 December 2018 was stated at £401,945. The Directors must assess at each reporting period end whether there is any indication that an asset may be impaired. The recoverability of stock was deemed to be a key audit matter as this is a material item on the Company's balance sheet, involves a degree of judgement to be exercised by management and is also inextricably linked to the recoverability of the Company's patents. As a new product, the MiD® 4500, was launched in the year, whether the Company will successfully generate unit sales of the product and whether the launch renders previous models of the product obsolete needs to be assessed. As a result, the Directors have reviewed the year end stock report for all items which may be slow-moving and have created a stock provision of £66,808 to reflect this.	Our audit procedures included the following: • We have assessed the methodology used by the Directors to calculate the stock provision and evaluated if it complies with applicable IFRS standards; • We have reviewed the Directors' calculation of the stock provision against sales activity in the year for any slow-moving stock, in order to identify whether the stock provision at the year end is appropriate; • We have attended the year end stock take in Woking and tested a sample of stock by reviewing the quantity held as stated on the stock report against the quantity physically verified, investigating any discrepancies; • We have reviewed the level of stock with reference to expectations and prior year figures; • We have reviewed the higher value stock items to ensure that quantities have been accurately updated in the accounting system; • We have tested a sample of stock and reviewed its carrying value against its net realisable value in order to ensure it has been held at the correct amount; and • We have assessed the appropriateness and completeness of the related disclosures in the financial statements against the requirements of IAS 2. Based on our procedures, we noted no material exceptions and considered management's key assumptions to be appropriate.

INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF MICROSAIC SYSTEMS PLC
For the year ended 31 December 2018

Our application of materiality

We apply the concept of materiality in planning and performing our audit, in evaluating the effect of any identified misstatements and in forming our opinion. Our overall objective as auditor is to obtain reasonable assurance that the financial statements as a whole are free from material misstatement, whether due to fraud or error. We consider a misstatement to be material where it could reasonably be expected to influence the economic decisions of the users of the financial statements.

We have determined a materiality of £55,000 (2017: £45,000). This is based on 2% of the loss for the year ended 31 December 2018.

An overview of the scope of our audit

We tailored the scope of our audit to ensure that we obtained sufficient evidence to support our opinion on the financial statements as a whole, taking into account the company's accounting processes and controls and the industry in which the company operates.

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the Directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. We also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the Directors that represented a risk of material misstatement due to fraud.

Other information

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

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

We have nothing to report in this regard.

INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF MICROSAIC SYSTEMS PLC
For the year ended 31 December 2018

Opinions on other matters prescribed by the Companies Act 2006
In our opinion, based on the work undertaken in the course of the audit:

- The information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- The Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception
In the light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic Report or the Directors' Report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- Adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- The financial statements are not in agreement with the accounting records and returns; or
- Certain disclosures of Directors' remuneration specified by law are not made; or
- We have not received all the information and explanations we require for our audit.

Responsibilities of directors
As explained more fully in the Directors' Responsibilities Statement set out on pages 20 to 21, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

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

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

Use of our report

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

……………………………….

Roger Weston (Senior Statutory Auditor)
for and on behalf of Saffery Champness LLP

Chartered Accountants
Statutory Auditors

71 Queen Victoria Street
London
EC4V 4BE

8 March 2019

STATEMENT OF COMPREHENSIVE INCOME
For the year ended 31 December 2018

	Notes	Year to 31 December 2018	Year to 31 December 2017
		£	£
Revenue	5	578,258	342,514
Cost of sales		(336,685)	(221,273)
Gross profit		241,573	121,241
Other operating income	6	76,262	51,004
Research and development expenses		(874,185)	(893,579)
Other operating expenses		(2,429,013)	(2,156,032)
Total operating expenses	7	(3,303,198)	(3,049,611)
Loss from operations before share-based payments		(2,985,363)	(2,877,366)
Share-based payments		(88,187)	(29,861)
Loss from operations after share-based payments		(3,073,550)	(2,907,227)
Finance income	8	31,046	18,745
Loss before tax		(3,042,504)	(2,888,482)
Tax on loss on ordinary activities	9	278,543	245,479
Total comprehensive loss for the year		(2,763,961)	(2,643,003)
Loss per share attributable to the equity holders of the Company			
Basic and diluted loss per ordinary share	10	(0.85)p	(1.46)p

The notes on pages 54 to 76 form part of these financial statements.

STATEMENT OF FINANCIAL POSITION
As at 31 December 2018

	Notes	31 December 2018	31 December 2017
		£	£
ASSETS			
Non-current assets			
Intangible assets	11	95,944	65,972
Property, plant and equipment	12	124,155	160,743
Total non-current assets		220,099	226,715
Current assets			
Inventories	13	401,945	483,496
Trade and other receivables	14	431,365	235,000
Corporation tax receivable	9	277,076	245,479
Cash and cash equivalents		5,402,221	3,182,176
Total current assets		6,512,607	4,146,151
TOTAL ASSETS		6,732,706	4,372,866
EQUITY AND LIABILITIES			
Equity			
Share capital	18	1,140,913	453,413
Share premium	20	24,867,886	20,504,071
Share-based payment reserve	19	345,806	273,380
Retained earnings		(20,079,133)	(17,330,933)
Total equity		6,275,472	3,899,931
Current liabilities			
Trade and other payables	15	286,531	288,821
Non-current liabilities			
Provisions	16	170,703	184,114
Total liabilities		457,234	472,935
TOTAL EQUITY AND LIABILITIES		6,732,706	4,372,866

The financial statements were approved for issue by the Board of Directors on 8 March 2019 and signed on its behalf by:

Glenn Tracey
Chief Executive Officer

Company number 03568010
The notes on pages 54 to 76 form part of these financial statements.

STATEMENT OF CHANGES IN EQUITY
For the year ended 31 December 2018

	Notes	Share capital	Share premium	Share -based payment reserve	Retained earnings	Total equity
		£	£	£	£	£
At 1 January 2017		453,413	20,504,071	302,069	(14,746,480)	6,513,073
Total comprehensive loss for the year		-	-	-	(2,643,003)	(2,643,003)
Transaction with owners:						
Shares issued		-	-	-	-	-
Share issue costs		-	-	-	-	-
Transfer in respect of lapsed share options		-	-	(58,550)	58,550	-
Share-based payments-share options		-	-	29,861	-	29,861
At 31 December 2017		453,413	20,504,071	273,380	(17,330,933)	3,899,931
Total comprehensive loss for the year		-	-	-	(2,763,961)	(2,763,961)
Transaction with owners:						
Shares issued	18/20	687,500	4,812,500	-	-	5,500,000
Share issue costs	20	-	(448,685)	-	-	(448,685)
Transfer in respect of lapsed share options		-	-	(15,761)	15,761	-
Share-based payments - share options		-	-	88,187	-	88,187
At 31 December 2018		1,140,913	24,867,886	345,806	(20,079,133)	6,275,472

The notes on pages 54 to 76 form part of these financial statements.

STATEMENT OF CASH FLOWS
For the year ended 31 December 2018

	Notes	Year to 31 December 2018 £	Year to 31 December 2017 £
Total comprehensive loss for the year		(2,763,961)	(2,643,003)
Amortisation of intangible assets	11	32,510	38,757
Depreciation of property, plant and equipment	12	90,405	114,186
Transfer of property, plant and equipment to stock	12	21,308	-
Profit on disposal of intangible assets		-	(5)
Loss on disposal of property, plant and equipment		-	6,907
(Decrease)/Increase in provision for leasehold dilapidations	16	(3,280)	7,751
Increase/(Decrease) in provision for warranty	16	4,869	(28,442)
(Decrease)/Increase in Provision for outsourced manufacturing	16	(15,000)	15,000
Share-based payments		88,187	29,861
(Decrease)/Increase in inventory provision	13	(19,247)	86,055
Tax on loss on ordinary activities	9	(278,543)	(245,479)
Interest received		(22,013)	(9,769)
Decrease in inventories	13	100,798	124,737
Increase in trade and other receivables	14	(196,365)	(71,269)
Decrease in trade and other payables	15	(2,290)	(138,921)
Cash used in operations		(2,962,622)	(2,713,634)
Corporation tax received		246,946	262,710
Net cash used in operating activities		(2,715,676)	(2,450,924)
Cash flows from investing activities			
Purchases of intangible assets	11	(62,482)	(20,347)
Purchases of property, plant and equipment	12	(75,125)	(84,916)
Proceeds from sale of property, plant and equipment		-	50
Interest received		22,013	9,769
Net cash used in investing activities		(115,594)	(95,444)
Cash flows from financing activities			
Proceeds from share issues	18/20	5,500,000	-
Share issue costs	20	(448,685)	-
Net cash from financing activities		5,051,315	-
Net increase/(decrease) in cash and cash equivalents		2,220,045	(2,546,368)
Cash and cash equivalents at the beginning of the year		3,182,176	5,728,544
Cash and cash equivalents at the end of the year		5,402,221	3,182,176

The notes on pages 54 to 76 form part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2018

The principal activity of the Company continues to be the research, development and commercialisation of miniaturised mass spectrometry instruments that are designed to improve the efficiency of pharmaceutical R&D. The Company is incorporated in England and its registered address is GMS House, Boundary Road, Woking, Surrey, GU21 5BX. The Company has no subsidiaries so the financial information relates to the Company only.

1. Accounting policies

The following principal accounting policies have been used consistently in the preparation of these financial statements.

Basis of preparation
These financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) and the interpretations of the International Financial Reporting Interpretations Committee (IFRIC) as adopted by the European Union, and with those parts of the Companies Act 2006 applicable to companies reporting under IFRS.

These financial statements have been prepared under the historical cost basis except where financial instruments are required to be carried at fair value under IFRS.

Revenue recognition
The adoption of IFRS 15 commenced on 1 January 2018. Apart from providing more extensive disclosures for the Company's revenue transactions, the application of IFRS 15 has not had a significant impact on the financial position or financial performance of the Company.

IFRS 15 places a limit on the amount that can be recognised so that revenue is only recognised when it is highly probable that there will not be a significant reversal in revenue in the future.

IFRS 15 provides a single, principles based five-step model to be applied to all contracts with customers. The five-step framework includes:
1) Identify the contract(s) with a customer;
2) Identify the performance obligations in the contract;
3) Determine the transaction price;
4) Allocate the transaction price to the performance obligations in the contract; and
5) Recognise revenue when the entity satisfies a performance obligation.

The Company recognises revenue from the following three sources:
1) Sale of products;
2) Sale of consumables and spare parts; and
3) Service and support income.

Revenue is measured based on the consideration which the Company expects to be entitled in a contract with a customer and excludes amounts collected on behalf of third parties. The Company recognises revenue when it transfers control of a product or service to a customer.

Sale of Products
The Company sells compact mass spectrometers (Microsaic 4500 MiD® and MiDas™) mainly through OEMs and Distributors. A small proportion of its sales are direct to the customer. Terms are Ex Works so control passes when the customer collects the goods. Payment terms are generally 30 days from the date of invoice. Discounts are offered and agreed as part of the contractual terms.

Sales of Consumables and spare parts
The Company sells consumables and spare parts mainly through OEMs and Distributors. Terms are Ex Works so control passes when the customer collects the goods. Payment terms are generally 30 days from the date of invoice. Discounts are offered and agreed as part of the contractual terms.

Service and Support income
Service and support to our OEMs and Distributors includes training their sales and service teams. It also includes servicing products from time to time. Terms are Ex Works so control passes when the customer collects the goods. Payment terms are generally 30 days from the date of invoice. Discounts are offered and agreed as part of the contractual terms.

Generally, there is no obligation on the Company for returns, refunds or similar arrangements. Also, the Company does not manufacture specific items to a customer's specification and no financing component is included in the terms with customers.

The Company provides assurance warranties which are 15 months from the date of shipment. These warranties confirm that the product complies with agreed-upon specifications. The Company is looking to provide service warranties in the future where the revenue from such warranties will be recognised over the period of the service agreement.

The Company shipped a product to a customer in October 2018 which was subject to performance conditions. This shipment is subject to a five month trial period. The customer has the right to return the unit if the trial is unsuccessful. After the acceptance by the client of the trial system the customer will pay 95% of the invoice value and retain 5% for payment one year after acceptance. A two year warranty applies from the date the unit is accepted. The performance obligations were not fulfilled at the 31 December 2018 and therefore no revenue was recognized from this transaction. The aggregate amount of the transaction price allocated to the performance obligations that were unsatisfied at the year end is £30,000. The Company will be advised in H1 2019 if the trial has been successful.

Revenue from co-development agreement(s) and grant income is recognised separately in the profit and loss under "Other Operating Income". Co-development income in 2018 amounted to £76,262 (2017: £47,281). The Company recognised the full amount of revenue from this third party contract as it had satisfied all its performance obligations and the contract had terminated.

Segmental reporting

The Company currently has one business segment, being the research, development and commercialisation of scientific instruments. This is undertaken wholly within the United Kingdom. Revenue by geographical market is analysed between the UK and non-UK in Note 5.

Intangible assets

Trademarks and patents are stated at historic cost of registration less accumulated amortisation and any accumulated impairment losses. Amortisation is charged to operating expenses and calculated to write off the cost in equal annual instalments over five years, which is considered to be a prudent estimate of their useful economic lives. Certain software is stated at historic cost less accumulated amortisation and any accumulated impairment losses. Amortisation is charged to operating expenses and calculated to write off the cost in equal annual instalments over three years, which is considered to be a prudent estimate of its useful economic life.

Property, plant and equipment

Items of property, plant and equipment are stated at cost of acquisition or production costs less accumulated depreciation and impairment losses. Depreciation is charged to the statement of comprehensive income on a straight-line basis to write-off the carrying value of each asset to residual value over its estimated useful economic life as follows:

Plant and equipment	- 33.3% on a straight line basis
Fixtures and fittings	- 33.3% on a straight line basis
Software	- 33.3% on a straight line basis

Pensions

The Company has an auto-enrolment pension scheme for employees. Contributions are charged to the statement of comprehensive income in the period they are payable.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is based on the first-in first-out principle and includes expenditure incurred in acquiring the inventories and bringing them to their present location and condition. The cost of finished goods and work in progress comprises raw materials, direct labour and other direct costs. Net realisable value is the estimated selling price in the ordinary course of business less applicable selling expenses.

Provisions

Provisions are established where the Directors have identified an obligation which is probable and where the amount can be estimated reliably.

Taxation

Current taxes are based on the results of the Company and are calculated according to local tax rules using the tax rates that have been enacted by the balance sheet date.

The Company recognises research and development tax credits receivable in cash as a current asset under the heading corporation tax receivable. Any difference to amounts actually received is dealt with as adjustments to prior period tax.

Deferred tax is provided in full using the balance sheet liability method for all taxable temporary differences arising between the tax bases of assets and liabilities and their carrying values for financial reporting purposes. Deferred tax is measured using currently enacted or substantially enacted tax rates.

Deferred tax assets are recognised to the extent the temporary difference will reverse in the foreseeable future and that it is probable that future taxable profit will be available against which the asset can be utilised.

Foreign currency translation
Monetary assets and liabilities denominated in foreign currencies are translated into sterling at the rates of exchange ruling at the balance sheet date. Transactions in foreign currencies are recorded at the rate ruling at the date of transaction, or forward contract rate, if applicable. All differences are taken to the statement of comprehensive income.

Financial instruments
The Company has adopted IFRS 9 which became effective on 1 January 2018. Financial assets and financial liabilities are recognised in the Company's statement of financial position when the Company becomes a party to the contractual provisions of the instrument. Examples of the Company's financial instruments include:

Cash and cash equivalents
The fair value of cash and cash equivalents is considered to be their carrying amount due to their short-term maturity.

Trade receivables
The Company's trade receivables do not carry a significant financing element as defined by IFRS 15. Therefore, trade receivables are recorded at transaction price (e.g., invoice amount excluding costs collected on behalf of third parties) and throughout the life of the receivable at an amount equal to life time expected credit losses ("ECL").

Financial liability and equity
Financial liabilities and equity instruments are classified according to the substance of the contractual arrangements entered into. An equity instrument is any contract that evidences a residual interest in the assets of the Company after deducting all its liabilities.

Bank borrowings
The Company had no bank borrowings at 31 December 2018 and 2017.

Trade payables
Trade payables are not interest bearing and are stated at their nominal value.

Equity instruments
Equity instruments issued by the Company are recorded at the value of the proceeds received net of direct issue costs including the fair value of any warrants issued in lieu of issue costs.

The Company has no derivative financial assets or investments in equity instruments.

IFRS 9 establishes a new approach on how financial assets should be reviewed for impairment.

A new approach for receivables, including trade receivables is introduced; an “expected loss” model that focuses on the risk that a loan will default rather than whether a loss has been incurred. Under the “expected credit loss” (ECL) model, the Company calculates the allowance for credit losses by considering the cash shortfalls it would incur in various default scenarios and multiplying the shortfalls by the probability of each scenario occurring. The Company only has short term receivables and has adopted a “simplified approach” in assessing impairment.

The Company has applied a simplified “provision matrix” for calculating expected losses as a practical expedient (e.g., for trade receivables), if consistent with the general principles for measuring expected losses. The provision matrix is based on an entity’s historical default rates over the expected life of the trade receivables and is adjusted for forward-looking estimates. The Company has no history of default and in agreeing default rates management has had to make certain assumptions.

In preparing the provision matrix the Company looks at the geographic base of its trade receivables and whether they are existing or new customers. Finally, management considered forward looking information that may affect the default rates applied in the matrix. The expected credit loss allowance was below material limits for the period.

Leases
Assets obtained under hire purchase contracts and finance leases are capitalised and depreciated over their useful lives. Obligations under such agreements are included in liabilities net of the finance charges allocated to future periods.

All other leases are considered operating leases, the costs of which are expensed on a straight-line basis over the lease term. Rent free periods and other incentives are spread on a straight-line basis over the lease term.

Research and development
Expenditure on research is recognised as an expense in the period in which it is incurred.

Development costs incurred on specific projects are capitalised when all the following conditions are satisfied:

- Completion of the intangible asset is technically feasible so that it will be available for use or sale;
- The Company intends to complete the intangible asset and use or sell it;
- The Company has the ability to use or sell the intangible asset;

- The intangible asset will generate probable future economic benefits. Among other things, this requires that there is a market for the output from the intangible asset or for the intangible asset itself, or, if it is to be used internally, the asset will be used in generating such benefits;
- There are adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- The expenditure attributable to the intangible asset during its development can be measured reliably.

Costs incurred which do not meet the above criteria are expensed as incurred. No development costs have been capitalised to date.

Share-based payments
In accordance with IFRS 2 "Share-based payments", the Company reflects the economic cost of awarding shares and share options to Directors, employees and advisors by recording an expense in the statement of comprehensive income equal to the fair value of the benefit awarded; fair value being determined by reference to option pricing models. The expense is recognised in the statement of comprehensive income over the vesting period of the award.

The fair value of warrants issued to advisors as remuneration for their services in a fundraising will be charged to share premium over the vesting period of the award.

2. Adoption of new and revised standards

During the financial year, the Company has adopted the following new IFRSs (including amendments thereto) and IFRIC interpretations, that became effective for the first time.

Standard	Effective date, annual period beginning on or after
Annual Improvements 2014-2016 cycle	1 January 2017/ 1 January 2018
IFRS 9 *Financial instruments*	1 January 2018
IFRS 15 *Revenue from contracts with Customers* including amendments to IFRS 15: *Effective date of IFRS 15*.	1 January 2018
Clarifications to IFRS 15 -*Revenue from contracts with Customers*	1 January 2018
IFRS 2 (amendments) - *Classification and Measurement of Share-based Payment Transactions*	1 January 2018
IFRS 4 (amendments) - *Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts*	1 January 2018
IFRIC Interpretation 22 - *Foreign Currency Transactions and Advance Consideration*	1 January 2018
Amendments to IAS 40 - *Transfers of Investment Property*	1 January 2018

Their adoption has not had any material impact on the disclosures or amounts reported in the financial statements.

IFRS 9 Financial Instruments (effective for accounting periods beginning on or after 1 January 2018)

This replaces IAS 39 Financial Instruments: Recognition and Measurement. Details of the impact of IFRS 9 can be found under accounting policies on pages 57 to 58.

IFRS 15 Revenue from Contracts with Customers (effective for accounting period beginning on or after 1 January 2018)

IFRS 15 specifies how and when the Company will recognise revenue as well as requiring the Company to provide the users with more informative, relevant disclosures. The standard provides a single, principles based five-step model to be applied to all contracts with customers. Details of the impact of IFRS 15 can be found under accounting policies on pages 54 to 55.

Standards issued but not yet effective:
At the date of authorisation of these financial statements, the following standards and interpretations relevant to the Company and which have not been applied in these financial statements, were in issue but were not yet effective. In some cases these standards and guidance have not been endorsed for use in the European Union.

Standard	**Effective date, annual period beginning on or after**
IFRS 16 *Leases*	1 January 2019
IFRIC 23 – *Uncertainty over Income Tax Treatments*	1 January 2019
Amendments to IFRS 9 – *Prepayment Features with Negative Compensation*	1 January 2019
Amendments to IAS 28 – *Long-term Interests in Associates and Joint Ventures*	1 January 2019
Annual improvements 2015-2017 cycle	1 January 2019
Amendments to IAS 19: *Plan amendment, Curtailment or Settlement*	1 January 2019
Amendments to References to the Conceptual Framework in IFRS Standards	1 January 2020
IFRS 17 - *Insurance Contracts*	1 January 2021

The Directors are evaluating the impact that these standards will have on the financial statements of the Company.

IFRS 16 specifies how the Company will recognise, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. The Company has one lease agreement longer than two years for the premises in Woking (see Note 21 to the financial statements). From 1 January 2019 the Company will recognise an asset reflecting the right to use the leased asset for the remaining lease term which ends on 8 September 2021, and a lease liability reflecting the obligation to make lease payments. Both the asset and the liability will be recognised on the balance sheet where previously they were off balance sheet. There will be no impact on cash flow but there will be an impact on the Income Statement as the operating lease payment will be replaced with a depreciation charge on the leased asset and an interest expense on the lease liability. EBITDA will also increase as both interest cost and depreciation charge will be excluded from the calculation. The Directors believe the impact of IFRS 16 will not be material on the financial results of the Company.

The Directors have reviewed the other standards effective from 1 January 2019 and do not believe they will have a material impact on the Company's financial reporting.

3. Going concern

Microsaic is engaged in the research, development and commercialisation of miniaturised point of care mass spectrometry detectors. The Company has raised funds in the past by issuing equity. The most recent fundraise was completed in June 2018 where the Company raised £5.5m before expenses from new and existing shareholders. As at 31 December 2018 the Company had £5.4m in cash and cash equivalents. In Q1 2019 the Board reviewed and approved a three year business plan. This plan includes the existing partnerships, coupled with several potential new collaborations, which will contribute to significant growth in 2019 and beyond. The strategy is to continue to invest in advanced technology for the emerging life science markets, such as bioprocessing and to accelerate business development activities in the traditional small molecule market where there is potential to get to cash breakeven in this segment alone. The Directors have reviewed the cash forecasts and financial projections of the business plan under various scenarios in order to assess the sensitivity of the Company's going concern position. This review indicates that the Company has enough cash to cover its anticipated working capital requirements for at least the next 12 months from the date of signing the Annual Report and Accounts. On this basis, the Directors have concluded that it is appropriate to prepare the financial statements on a going concern basis.

4. Critical accounting estimates and judgements

Accounting estimates and judgements are continually evaluated and are based on past experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Company makes estimates and assumptions concerning the future. The resulting accounting estimates could, by definition, differ from the actual outcome.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are summarised below:

Going concern
The financial statements have been prepared on a going concern basis, as highlighted in Note 3 above.

Amortisation of trademarks and patents
Capitalised costs relating to trademarks and patents are amortised over their estimated useful lives. As the product development programme is still ongoing and the lifetime of the Company's intellectual property is difficult to determine, the Directors have applied a prudent estimate of five years. This assumption is reviewed at each balance sheet date and amended if required.

Share-based payments
The calculation of the share-based payment expense utilises assumptions and estimates (for example volatility, future exercise rates) which may differ from actual results. Details of the assumptions are set out in Notes 25 and 26 to the financial statements.

Provision for dilapidations
The Company occupies leasehold premises. The Directors have assessed the level of provision for dilapidations after consultation with their advisors and made a provision accordingly.

Provision for Inventories
The provision for inventories in 2018 of £66,808 (2017: £86,055) is to cover the write-off of a superseded product following the introduction of a new product together with spare and replacement parts that may also become obsolete. The actual outcome may differ from this estimate.

Provision for warranties
The Company provides OEMs and distributors with a 15-month warranty on mass spectrometry products. The provision is based on an estimate of historical costs including materials, replacement parts and the cost of service engineers that may have to be incurred over the warranty period.

Research and development tax credits
The Company recognises research and development tax credits receivable in cash as a current asset under the heading corporation tax receivable. These credits are subject to acceptance by HM Revenue & Customs and the resulting cash receipt may be greater or less than this amount.

Credit Loss
Life time expected credit losses ("ECLs") have been calculated using a provision matrix (see Financial Instruments under Accounting Policies) where the Company has made assumptions on the default rates used in calculating the ECLs of trade receivables.

5. Revenue

Throughout 2018, the Company operated in one business segment, that of research, development and commercialisation of mass spectrometry instruments. Further attribution of the non-UK revenue is not possible due to the nature of the sales to distributors and OEM customers which are supplied directly by the Company but distribute the products in multiple countries. One customer represented 51% of total revenue (2017: 74%).

The geographical analysis of revenue (by location of shipment) was as follows:

	Year to 31 December 2018	Year to 31 December 2017
	£	£
UK	28,805	41,959
Non-UK	549,453	300,555
	578,258	342,514

6. Other operating income

The Company's other operating income for the year ended 31 December 2018 represents co-development income of £76,262 (2017: £51,004).

7. Expenses by nature

	Year to 31 December 2018	Year to 31 December 2017
	£	£
Loss from operations is stated after charging/(crediting)		
Amortisation of intangible assets	32,510	38,757
Movement in inventory provision	(19,247)	86,055
Inventories expensed	25,962	7,760
Depreciation of property, plant and equipment	90,405	114,186
Loss on disposal of property, plant and equipment	-	6,907
Provision for dilapidations of leased buildings	8,918	7,751
Provision for warranty	4,869	(28,442)
Provision for outsourced manufacturing	-	15,000
Profit on disposal of intangible assets	-	(5)
Pension costs	123,771	101,812
Share-based payments - equity settled	88,187	29,861
Operating lease rentals - land and buildings	207,940	158,667
Exchange loss/(gain)	(1,917)	4,248
Research and development expenditure (before pensions)	815,276	842,313
Directors' emoluments (before pensions and share-based payments)	355,527	284,306

	Year to 31 December 2018	Year to 31 December 2017
	£	£
Services provided by the Company's auditors		
Fees payable to the Company's auditors for the audit of the financial statements	19,450	18,375
Fees payable to the Company's auditors for other services		
- Tax compliance	5,500	4,000
- Other	3,310	3,575
	28,260	25,950

8. Finance income

	Year to 31 December 2018	Year to 31 December 2017
	£	£
Bank interest receivable	31,046	18,745

9. Tax on loss on ordinary activities

	Year to 31 December 2018	Year to 31 December 2017
	£	£
Domestic current period tax		
UK corporation tax receivable	(277,076)	(245,479)
Adjustment for prior periods	(1,467)	-
Current tax credit	(278,543)	(245,479)
Tax on loss on ordinary activities	(278,543)	(245,479)
Factors affecting the current tax credit for the period:		
Loss before tax	(3,042,504)	(2,888,482)

	Year to 31 December 2018 £	Year to 31 December 2017 £
Loss before tax multiplied by standard rate of UK corporation tax of 19%* (2017: 19.25%)	(578,076)	(556,033)
Effects of:		
Non-deductible expenses	26,033	6,744
Depreciation	17,177	21,981
Loss on disposal of property, plant and equipment	4,049	1,329
Capital allowances	(14,457)	(16,791)
Research and development expenditure	(119,222)	(103,786)
Tax losses carried forward	387,420	401,077
Previous period research and development adjustment	(1,467)	-
Current tax credit	(278,543)	(245,479)

* The tax rate from the 1 April 2017 was 19%.

The Company has estimated tax losses of £19,677,937 (2017: £17,643,288) available for carry forward against future trading profits. Deferred tax note is detailed in Note 17.

10. Basic and diluted loss per ordinary share

	Year to 31 December 2018 £	Year to 31 December 2017 £
Loss after tax attributable to equity shareholders	(2,763,961)	(2,643,003)
Weighted average number of ordinary 0.25p shares for the purpose of basic and diluted loss per share	324,515,831	181,365,146
Basic and diluted loss per ordinary share	(0.85)p	(1.46)p

The basic loss per share fell by 42% from 1.46p to 0.85p per share, primarily as a result of the increase in the number of shares in issue following the fundraise. Potential ordinary shares are not treated as dilutive as the Company is loss making, therefore the weighted average number of ordinary shares for the purposes of the basic and diluted loss per share are the same.

11. Intangible assets

Intangible assets comprise patents and trademarks owned by the Company. The cost is amortised on a straight-line basis over a five year period as this has been judged as their estimated useful life.

Year ended 31 December 2018:

	£
Cost	
At 1 January 2018	460,488
Additions	62,482
Disposals	-
At 31 December 2018	522,970
Amortisation	
At 1 January 2018	394,516
Charge for the year	32,510
Disposals	-
At 31 December 2018	427,026
Net book value	
At 31 December 2018	95,944

Year ended 31 December 2017:

	£
Cost	
At 1 January 2017	443,378
Additions	20,347
Disposals	(3,237)
At 31 December 2017	460,488
Amortisation	
At 1 January 2017	359,001
Charge for the year	38,757
Disposals	(3,242)
At 31 December 2017	394,516
Net book value	
At 31 December 2017	65,972

12. Property, plant and equipment

Year ended 31 December 2018:

	Plant and equipment	Fixtures and fittings	Total
	£	£	£
Cost			
At 1 January 2018	709,126	296,390	1,005,516
Additions	74,900	225	75,125
Disposals	(37,438)	(72,013)	(109,451)
Transfer	(24,745)	-	(24,745)
At 31 December 2018	721,843	224,602	946,455
Depreciation			
At 1 January 2018	551,774	292,999	844,773
Charge for the year	87,504	2,901	90,405
Disposals	(37,438)	(72,013)	(109,451)
Transfer	(3,437)	-	(3,437)
At 31 December 2018	598,403	223,887	822,290
Net book value			
At 31 December 2018	123,440	715	124,155

Year ended 31 December 2017:

	Plant and equipment	Fixtures and fittings	Total
	£	£	£
Cost			
At 1 January 2017	657,030	295,708	952,738
Additions	84,234	682	84,916
Disposals	(32,138)	-	(32,138)
At 31 December 2017	709,126	296,390	1,005,516
Depreciation			
At 1 January 2017	489,405	266,363	755,768
Charge for the year	87,550	26,636	114,186
Disposals	(25,181)	-	(25,181)
At 31 December 2017	551,774	292,999	844,773
Net book value			
At 31 December 2017	157,352	3,391	160,743

13. Inventories

	Year to 31 December 2018	Year to 31 December 2017
	£	£
Raw materials	337,918	540,748
Work in progress	35,128	-
Finished goods	95,707	28,803
Subtotal	468,753	569,551
Provision for inventories	(66,808)	(86,055)
Total	401,945	483,496

Inventories are lower in 2018 following higher sales during the year. The provision reduced in 2018 but covers the potential write off of inventories for products and spare parts associated with a potentially obsolete product.

14. Trade and other receivables

	Year to 31 December 2018	Year to 31 December 2017
	£	£
Amounts falling due within one year		
Trade receivables	248,165	87,663
Other receivables	161,374	127,728
Other taxes and social security	21,826	19,609
	431,365	235,000

The ageing of trade receivables was as follows:

	£	£
Not past due	173,992	44,071
1 to 30 days past due	73,973	43,592
31 to 60 days past due	200	-
	248,165	87,663

The receivables balance up to 30 days overdue was paid in January 2019.

15. Trade and other payables

	Year to 31 December 2018	Year to 31 December 2017
	£	£
Amounts falling due within one year		
Trade payables	60,540	94,628
Other taxes and social security	46,261	45,934
Other payables	12,850	11,588
Accruals and deferred income	166,880	136,671
	286,531	288,821

16. Provisions

	Dilapidations	Outsourced Manufacturing	Warranties	TOTAL
	£	£	£	£
Balance at 1 January 2018	100,197	15,000	68,917	184,114
Charges against provision	(12,198)	(15,000)	-	(27,198)
Provided for during the year	20,720	-	4,869	25,589
Write back to P&L	(11,802)	-	-	(11,802)
Balance at 31 December 2018	96,917	-	73,786	170,703

The provision for anticipated dilapidations is in respect of the Company's leasehold premises at Woking. The Oxford lease was terminated in December 2018. The Company agreed with the landlord a lower contribution for dilapidations than the provision held, and the balance was written back to the P&L. The provision carried forward is based on the potential future cost which could be incurred at the end of the lease.

The provision for outsourced manufacturing was utilised during the year.

The Company provides OEMs and distributors with an up to 15-month warranty on mass spectrometry products. The provision above is the anticipated cost of servicing those warranty claims which are serviced by Microsaic's own staff. The provision is based on historical costs including materials, replacement parts and the cost of service engineers that may have to be incurred over the warranty period. The provision for warranty increased by £4,869 in the year.

17. Deferred tax

Deferred taxation provided in the financial statements:

	£
Balance at 1 January and 31 December 2018	-

A deferred tax asset in respect of tax losses has only been recognised to the extent of the deferred tax liability in respect of accelerated capital allowances at a tax rate of 17%.

	Year to 31 December 2018	Year to 31 December 2017
	£	£
Accelerated capital allowances	20,701	29,988
Tax losses carried forward	(20,701)	(29,988)
	-	-

18. Share capital

	Number	£
Allotted, called up and fully paid ordinary shares of 0.25p each		
Ordinary shares as at 31 December 2017	181,365,146	453,413
Ordinary shares issued for cash in the year	275,000,000	687,500
Ordinary shares as at 31 December 2018	456,365,146	1,140,913

The Company has one class of share, ordinary shares of 0.25p each, with each share carrying one vote and equal rights to discretionary dividends. No shares were issued during the year. In 2018 the Company issued the following ordinary shares of 0.25p each for cash:

	Shares issued	Issue price	Cash consideration
	Number	Pence	£
25 June 2018 Placing of shares	275,000,000	2	5,500,000

19. Reserves

The share premium account represents the excess over the nominal value for shares allotted less issue costs. The share option reserve represents accumulated charges made under IFRS 2 in respect of share-based payments. Where share options expire, lapse or are exercised, the amounts within the share-based payments reserve relating to those options are transferred to retained earnings as shown in the Statement of Changes in Equity.

20. Share premium

	Year to 31 December 2018 £	Year to 31 December 2017 £
Opening balance brought forward	20,504,071	20,504,071
Shares issue in the year	4,812,500	-
Share issue costs	(448,685)	-
Closing balance carried forward	24,867,886	20,504,071

21. Operating lease commitments

At the year end the Company had future minimum lease payments under non-cancellable operating leases which fall due as follows:

	Year to 31 December 2018 £	Year to 31 December 2017 £
Land and buildings		
Within one year	115,622	205,438
Between two and five years	126,575	199,856
	242,197	405,294
Equipment		
Within one year	2,637	620
Between two and five years	6,443	2,100
	9,080	2,720

The lease on the Woking facility was renewed in September 2016 for a period of five years at an average annual rent of £73,500. There is no break clause in this lease. The lease on the Milton Park office in Abingdon was renewed in December 2017 for a period of three years at an annual rent of £61,354. The Company terminated this lease on 22 December 2018 by giving four months' written notice together with an exit payment equivalent to eight months' rent. A new lease effective 16 November 2018 was signed with United Kingdom Atomic Energy Authority at the Culham Science Centre, Abingdon, at an initial annual rent plus service charges of £23,732. This lease has two break clauses; the first of which is on 15 November 2019 and the second on 15 November 2020.

22. Capital commitments

	Year to 31 December 2018	Year to 31 December 2017
	£	£
Contracted for but not provided in the financial statements	928,947	-

The capital commitment relates to purchase orders placed on our third-party manufacturer.

23. Directors' emoluments

	Year to 31 December 2018	Year to 31 December 2017
	£	£
Salaries and fees	354,396	283,462
Non-cash payments	1,131	844
Pension costs	22,060	11,181
Employment related share-based payments	58,019	21,220
	435,606	316,707

In the year to 31 December 2018 two Executive Directors that served during the year accrued benefits under the Company's auto-enrolment pension scheme. There are no key management personnel other than the Directors.

The highest paid Director, Mr Glenn Tracey, received emoluments of £157,815 as disclosed in the Directors' Remuneration Report, which included a share-based payment charge of £18,303.

There were no gains on the exercise of share options in the year.

24. Employees

	Year to 31 December 2018	Year to 31 December 2017
	Number	Number
Directors	6	6
Other staff	21	22
	27	28

	Year to 31 December 2018	Year to 31 December 2017
	£	£
Employment costs (including Directors)		
Wages and salaries	1,378,668	1,245,468
Social security costs	148,910	136,324
Termination payments	30,342	32,859
Pension costs	123,771	101,812
Employment related share-based payments	88,187	29,861
	1,769,878	1,546,324

25. Share-based payments

Share option schemes

The Company operates an EMI and an unapproved share option scheme as a means of encouraging ownership and aligning interests of staff and shareholders. The table below shows the number of options outstanding and exercisable at 31 December 2018 and the weighted average exercise price.

	Year to 31 December 2018		Year to 31 December 2017	
	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price
Outstanding at the beginning of the year	5,447,200	11.4p	7,897,200	11.1p
Granted during the year	9,000,000	4.1p	-	-
Forfeited/expired during the year	(483,200)	15.2p	(2,450,000)	10.4p
Exercised during the year	-	-	-	-
Outstanding at 31 December	13,964,000	6.5p	5,447,200	11.4p
Exercisable at 31 December	544,000	40.9p	627,200	44.3p

Details of options in issue at the year-end are:

Date of grant	Exercise price	Latest exercise date	Estimated fair value	Number of options 31 December 2018	Number of options 31 December 2017
February 2008	*129.31p	February 2018	26.6p	-	23,200
December 2010	*25.86p	December 2020	11.0p	29,000	29,000
July 2012	42.00p	July 2022	12.1p	230,000	290,000
May 2014	46.80p	May 2024	11.4p	110,000	110,000
November 2014	49.50p	November 2024	11.9p	100,000	100,000
April 2015	47.75p	May 2025	10.5p	100,000	100,000
January 2016	23.50p	January 2026	11.7p	395,000	395,000
September 2016	5.00p	September 2026	2.0p	2,200,000	2,400,000
September 2016	5.00p	September 2026	0.6p	2,000,000	2,000,000
January 2018	4.05p	January 2018	1.3p	3,300,000	-
January 2018	4.05p	January 2018	2.2p	5,500,000	-
				13,964,000	5,447,200

The estimated fair values of the share options were calculated by applying the Black Scholes or Monte Carlo models. The period of exercise for all options granted is between one and ten years from date of grant and the vesting period is normally 3 years from the date of grant. Prior to 2016 the expected volatility had been determined by calculating the historical volatility of the share price over the previous year. From September 2016, and consistent with the application guidance in IFRS 2, the Company considered the most appropriate method to calculating volatility to be the use of the historical volatility of comparable listed companies. The model inputs are detailed below:

The model inputs using Black Scholes were:

Date of grant	Exercise price	Share price	Risk free rate	Expected volatility	Gross dividend yield
February 2008	*129.31p	*129.31p	5.25%	35%	-
December 2010	*25.86p	*25.86p	1.50%	75%	-
July 2012	42.00p	42.00p	0.50%	33%	-
May 2014	46.80p	46.80p	2.69%	16%	-
November 2014	49.50p	49.50p	2.05%	18%	-
April 2015	47.75p	47.75p	1.58%	17%	-
January 2016	23.50p	23.50p	1.74%	38%	-
September 2016	5.00p	5.12p	0.87%	30%	-
January 2018 (staff)	4.05p	4.29p	0.79%	31%	-
January 2018 (directors)	4.05p	4.29p	1.29%	39%	-

* the share prices and corresponding option exercise prices for grants made up to 2010 have been adjusted for a bonus issue and share sub-division that took place in April 2011.

26. Warrants

On 20 October 2015, the Company granted Warrants to Numis Securities Ltd, the Company's brokers as part of its remuneration for the equity placing which was completed in October 2015, to subscribe for 1,467,303 ordinary shares, being 2% of the issued share capital of the Company on that date. The exercise price of the Warrants is 33p and the Warrants can be exercised for a period of 5 years from the date of grant.

The estimated fair value of the Warrants of 8.84p was calculated by applying the Black Scholes model. The period of exercise for the Warrants is 5 years from the date of grant and there is no vesting period. The expected volatility has been determined by calculating the historical volatility of the share price over the previous year.

The model inputs were:

Date of grant	Share price	Exercise Price	Risk free rate	Expected volatility
October 2015	33.0p	33.0p	1.86%	37%

27. Financial instruments

The Company's financial instruments comprise cash and various trade receivables and trade payables that arise directly from its operations. No trading in financial instruments is undertaken.

The main risks arising from the Company's financial instruments are liquidity, currency and interest rate. The Board oversees the management of these risks, which are summarised below.

Liquidity risk
The Company finances its operations from equity funding provided by shareholders and revenues generated by the business. The Company seeks to manage liquidity risk to ensure enough funds are available to meet working capital requirements.

The Company invests its cash reserves in bank and money market deposits as a liquid resource to fund its operations. The Company's strategy for managing cash is to balance interest income with counterparty risk ensuring the availability of cash to match the profile of the Company's cash flows.

Interest rate risk
The Company does not face any significant interest rate risk as it has no borrowings. Surplus funds are invested to maintain a balance between accessibility of funds, competitive rates, and counterparty risk while investing funds safely.

Credit risk
The Company manages its credit risk in cash and cash equivalents by spreading surplus funds between creditworthy financial institutions.

The Company is also exposed to credit risk attributable to trade and other receivables. The maximum credit risk in respect of the financial assets at each period end is represented by the balance outstanding on trade and other receivables. The Company has limited exposure to credit risk, as the majority of its trade and other receivables are due from major corporations and institutions. The Company monitors the credit worthiness of its customers on a regular basis.

Foreign currency risk
The majority of the Company's transactions are denominated in pounds sterling. The Company has no long-term commitments to purchase goods or services in foreign currencies. Purchases denominated in foreign currency are expensed at the exchange rate prevailing at the date of the transaction and represents an immaterial proportion of the Company's total expenditure.

The only assets and liabilities denominated in foreign currencies relate to trade receivables and trade payables with overseas counterparties together with small balances of US dollar and Euro currencies to settle these liabilities. The risks and sums involved are immaterial.

Fair values
The Directors consider that there is no material difference between the book value and the fair value of the financial instruments at 31 December 2018 and 31 December 2017.

Capital management
The Company's capital base comprises equity attributable to shareholders. As the Company's focus has been on establishing itself as a successful supplier of MS detectors, the primary objective in managing cash spend has been to achieve progress on product development and commercialisation in a cost-efficient manner and in managing liquidity risk to ensure the Company continues as a going concern.

28. Related party transactions

The remuneration paid to the Directors is shown in Note 23 to the financial statements.

The only other related party during the year was Parkwalk Advisors, the Company's largest shareholder with a 27.21% interest in the Company. No services were provided by Parkwalk Advisors during the year. Parkwalk Advisors provided a one-off recruitment service in 2017 (2017: £15,000 including VAT). At the end of the year, no monies were owed to Parkwalk Advisors (2017: £12,600 outstanding).

29. Control

As at 31 December 2018, no individual shareholder had a controlling interest in the Company.

30. Events after the Reporting Date

There are no events after the 31 December 2018 to report.