

**N4 Pharma Plc**

**(“N4 Pharma” or the “Company”)**

**Interim Results**

N4 Pharma Plc (AIM: N4P), the specialist pharmaceutical company developing Nuvec<sup>®</sup>, a novel delivery system for vaccines and cancer treatments, announces its unaudited interim results for the six months ended 30 June 2019.

**Key events:**

- Placing of 10,500,000 ordinary shares to raise approximately £1.0m net of expenses
- Commissioned repeat of its successful *in vivo* study using Ovalbumin (“OVA”) pDNA at University of Queensland (“UQ”) to try and identify causes of inconsistent results seen working with University of Adelaide and other CROs
- Commenced search for other asset opportunities to add to the Company portfolio
- Appointment of Dr John Chiplin as non-executive Chairman
- Appointment of Dr Chris Britten as non-executive Director
- Cash balance at period end of approximately £1.2 million

**Post period end:**

- Received successful results for UQ OVA pDNA study, confirming the ability of Nuvec<sup>®</sup> to increase antibody responses using multiple injections at certain doses
- Commenced work to improve dispersity of Nuvec<sup>®</sup> formulations loaded with pDNA and initiate further *in vivo* work to test improved formulation

**Nigel Theobald, Chief Executive Officer of N4 Pharma Plc, commented:**

“In this period, we have confirmed that Nuvec<sup>®</sup> works for both DNA and mRNA delivery, having produced an antibody response for both. We have also made progress in understanding how Nuvec<sup>®</sup> behaves once loaded with DNA and mRNA. We have put in place a clear plan to investigate how we can improve the dispersion of Nuvec<sup>®</sup> once loaded with DNA. We will then test this improvement in both *in vitro* and *in vivo* studies and conduct an oncology efficacy model.

The development and improvement of our Nuvec<sup>®</sup> particle once loaded with DNA and mRNA is an essential step on its path towards use in clinical trials and usual for the evolution of any delivery system. Nuvec<sup>®</sup> still shows great potential as a delivery system for nucleic acids and we remain excited and confident about its future.”

**Enquiries:**

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**About N4 Pharma**

N4 Pharma is a specialist pharmaceutical company developing a novel delivery system for vaccines and cancer treatments using its unique silica nanoparticle delivery system called Nuvec<sup>®</sup>.

N4 Pharma's business model is to partner with companies developing novel antigens for vaccines and cancer treatments to use Nuvec® as the delivery vehicle to get their antigen into cells to express the protein needed for the required immunity. As these products progress through pre clinical and clinical programs, N4 Pharma will seek to receive up front payments, milestone payments and ultimately royalty payments once products reach the market.

## Chairman's Statement

### Half year results

During the six months to 30 June 2019, the Company raised an additional £1.0m net of expenses through the issue of 10,500,000 new ordinary shares.

The operating loss for the period was £550,573 (2018: £553,379).

Cash balance at 30 June 2019 was £1,167,547 (30 June 2018: £1,586,474).

### Board changes

During the period, the Company appointed John Chiplin as non-executive Chairman and Chris Britten as a non-executive Director. Paul Titley stood down as a director and employee of the Company. David Templeton became an executive director, taking responsibility for the technical aspects of Nuvec® development. These changes bring considerable experience and expertise to the Board in order to take the Company forward.

### Nuvec® development work

The first part of 2019 has seen the Company make considerable progress in enhancing the understanding and performance of the Nuvec® system through a series of its own studies and research collaborations. Following this work, and together with previous studies, the Company has established that:

- a range of DNA and mRNA antigens can be loaded onto the Nuvec® particles and successfully transfect cells *in vitro*;
- Nuvec® mechanism of action to transfect cells is via endocytosis into the cell and release of payload into the cytoplasm;
- Nuvec® has a good safety profile, degrades naturally in the body and, since it is not lipid in composition, is devoid of potential lipid induced liver damage;
- importantly, Nuvec® works for pDNA and mRNA having shown *in vivo* antibody response for both;
- Nuvec® currently delivers a good antibody response from 2-3 injections; and
- evidence from *in vitro* studies suggests that Nuvec®, when prepared for *in vivo* dosing, does not produce a monodisperse suspension after the addition of DNA, which the Directors believe is the most likely cause of the inconsistent results observed across certain studies.

The data generated so far is encouraging and shows that, with proposed enhancements, Nuvec® has the potential to be an effective delivery system for nucleic acids.

### Repeat University of Queensland Study

The recent repeat of the University of Queensland (UQ) study using OVA pDNA was performed because work with other CROs and collaborators, undertaken subsequently to the initial UQ studies, showed inconsistent results. The repeat study with UQ added an additional arm to investigate the response with one injection as well as three injections, and at different dose levels. The repeat study confirmed a good response using Nuvec® at higher doses using three

injections but no response with just one injection. The original UQ study had not tested the response using just one injection.

Together with other data, this work also showed that once the Nuvec® particles were loaded with OVA pDNA, the formulation was not ideally dispersed. This lack of dispersion is not an issue for *in vitro* work but is also a key likely explanation as to the inconsistency seen when using Nuvec® *in vivo* and may also contribute to previous study inconsistencies using just one injection.

### Going forward

The work the Company has undertaken itself and with collaborators shows that the focus now needs to be on improving the formulations of Nuvec® once loaded with DNA and RNA to ensure delivery of maximum antibody generation *in vivo*. This is standard work in the evolution of any delivery system. The focus of this work is not to alter the basic silica nanoparticle, but rather to look at the processes of how to load a linker to the silica particle to enable DNA or RNA to be loaded to the particle and also how the DNA or RNA is then loaded onto the Nuvec® particle. The objective of the work is to improve these processes so that a more monodisperse formulation of DNA loaded Nuvec® is achieved and any agglomeration is minimized.

It is anticipated that a more monodisperse formulation would likely lead to improved transfection efficiency *in vivo*, greater consistency of results and may also increase the response from a single injection.

To that end, the Company has put the following top-level plan in place. The work is divided into two distinct phases, each of which has certain stages upon which the Company will provide updates as they progress.

The first is to generate Nuvec® with better potential for dispersion in aqueous suspensions, improve dispersion techniques, and optimise the addition of DNA. In doing so the Company will seek to address the issues it perceives may have been causing inconsistencies to date. The work to be done will involve four, sequential, stages:

1. Nuvec® manufacturing process alterations (i.e. addition of PEI onto silica nanoparticles which allows for subsequent loading of DNA/mRNA)
2. Nuvec® dispersion testing
3. Improved Nuvec® DNA loading process
4. Analyse the effect of the Nuvec® concentration, the DNA:Nuvec® ratio and solution composition on DNA: Nuvec® agglomeration

These four stages of the first phase of work are expected to take approximately six months and conclude by early Q2 2020.

Following a successful conclusion of phase one, phase two will be to focus on *in vitro* testing of the improved product, followed by *in vivo* testing seeking an improved transfection and immune response, before finally conducting an *in vivo* cancer model study. Subject to the phase one timetable being achieved, it is expected that these three stages of phase two would conclude before the end of 2020.

These two phases will be key milestones to achieve in order for the Company to start working with partners in any clinical programs and embark on licencing discussions.

In parallel to the work outlined above, the Company continues to see progress on its licensed patent application from UQ. The UQ patent application is now going through dialogue with the European and US patent examiners and has entered Australia, China, India and Japan national phases where examiner response is awaited. Should the grant be received in 2020, it would dovetail well with the conclusion of the ongoing work on Nuvec® and further support any discussions with potential partners.

The Company is still awaiting feedback from the European Nanomedicine Characterisation Laboratory ("EUNCL") characterisation program for Nuvec®, initially estimated for the end of this quarter. The characterisation program aims

to provide state-of-the-art pre-clinical characterisation of innovative nanomaterials such as Nuvec® in order to accelerate their development towards regulatory approval by the European Medicines Agency ("EMA") and the national agencies. Whilst these results will further enhance our data package and increase our understanding of the variables which may affect Nuvec® it is not expected that they would impact on the work plan identified to address the findings of other studies to date. A further update will be provided once these results have been received.

## Outlook

Fundamentally, our strategy remains the same and therefore the prospects and value potential for Nuvec® remain as previously stated. To date, we have focused on generating our own *in vitro* and *in vivo* data using Nuvec® and undertaking research collaborations with third parties to gather extra information. The ultimate aim of doing this work is to get to a point where we could begin widescale commercial collaboration and licensing in 2020. The recent learnings and subsequent proposed plan still keep us on track to start these discussions, albeit towards the end of 2020. In terms of typical pharmaceutical development time lines, this is a relatively minor delay.

The use of DNA and RNA as vaccines and treatments, especially in oncology, is increasingly of interest clinically and, consequently, the market potential is substantial. A consistent theme in all discussions about the potential for DNA and RNA antigens to become products is the need for a safe and effective delivery system and it is the Boards opinion that Nuvec® could have a significant role in that market.

The Board remains very optimistic about the future of the Company and its prospects. We are aware that the change in timelines can be viewed as disappointing, but it is vital to remember that we are a Lifescience Company and as such need to take the appropriate time and degree of accuracy to ensure that we will be able to commercialise Nuvec®. Regular updates will be provided on the progress of the workplan.

The Board also recognises the need to investigate other assets and opportunities that the Company can add to its portfolio and continue to seek such opportunities.

On behalf of the Board, I would like to thank all of our shareholders for their continued support and look forward to providing further updates on our progress.

By order of the Board  
John Chiplin  
Chairman  
N4 Pharma Plc

## Glossary of technical terms

Monodisperse: containing particles of uniform size

Agglomeration: particles clumping together

**N4 Pharma Plc and its controlled entities**  
**Condensed consolidated Statement of Comprehensive Income (unaudited) for the six months ended 30 June 2019**

Notes	Six months to 30 June 2019 (Unaudited) £	Six months to 30 June 2018 (Unaudited) £	Twelve months to 31 December 2018 (Audited) £
Government grant income	-	49,308	72,832
<b>Gross Profit</b>	<b>-</b>	<b>49,308</b>	<b>72,832</b>
Research and development costs	(117,694)	(287,160)	(846,176)
General and administration costs	(432,879)	(315,527)	(643,745)
<b>Operating loss for the period</b>	<b>(550,573)</b>	<b>(553,379)</b>	<b>(1,417,089)</b>
Finance expenditure	(1,587)	(535)	(981)
Gain on sale of investment	-	27,693	27,693
<b>Loss for the period before tax</b>	<b>(552,160)</b>	<b>(526,221)</b>	<b>(1,390,377)</b>
Taxation	-	(16,134)	205,534
<b>Loss for the period after tax</b>	<b>(552,160)</b>	<b>(542,355)</b>	<b>(1,184,843)</b>
Other comprehensive income net of tax	-	-	-
<b>Total comprehensive loss for the period attributable to equity owners of N4 Pharma Plc</b>	<b>(552,160)</b>	<b>(542,355)</b>	<b>(1,184,843)</b>

**Loss per share attributable to owners of the parent**

Weighted average number of shares:

Basic	98,852,040	87,892,979	89,440,373
Diluted	104,379,981	92,128,151	91,305,287
Basic loss per share	<b>(0.56p)</b>	<b>(0.62p)</b>	<b>(1.32p)</b>
Diluted loss per share	<b>(0.53p)</b>	<b>(0.59p)</b>	<b>(1.30p)</b>

All activities derive from continuing operations.  
The notes below form an integral part of these financial statements.

**N4 Pharma Plc and its controlled entities**  
**Condensed consolidated Statement of Financial Position (unaudited) for the six**  
**months ended 30 June 2019**

	Notes	30 June 2019 (Unaudited) £	30 June 2018 (Unaudited) £	31 December 2018 (Audited) £
<b>Assets</b>				
<b>Non-current assets</b>				
Investments		-	-	-
		-	-	-
<b>Current assets</b>				
Trade and other receivables		265,481	128,275	276,926
Cash and cash equivalents		1,167,547	1,586,474	793,141
		1,433,028	1,714,749	1,070,067
<b>Total Assets</b>		<b>1,433,028</b>	<b>1,714,749</b>	<b>1,070,067</b>
<b>Liabilities</b>				
<b>Current liabilities</b>				
Trade and other payables		(81,863)	(174,897)	(159,666)
Accruals and deferred income		(22,200)	(18,049)	(30,457)
<b>Total assets less current liabilities</b>		<b>1,328,965</b>	<b>1,521,803</b>	<b>879,944</b>
<b>Net Assets</b>		<b>1,328,965</b>	<b>1,521,803</b>	<b>879,944</b>
<b>Equity</b>				
Share capital	4	8,676,675	8,634,675	8,634,675
Share premium	5	10,328,797	9,307,849	9,328,848
Share option reserve	6	41,141	102,279	81,909
Reverse acquisition reserve	5	(14,138,244)	(14,138,244)	(14,138,244)
Merger relief reserve	5	279,347	279,347	279,347
Retained earnings		(3,858,751)	(2,664,103)	(3,306,591)
<b>Total Equity</b>		<b>1,328,965</b>	<b>1,521,803</b>	<b>879,944</b>

**N4 Pharma Plc and its controlled entities**  
**Condensed consolidated Statement of Changes in Equity (unaudited) for the six months ended 30 June 2019**

**(i) Six months ended 30 June 2019 - Unaudited**

	Share Capital	Share Premium	Share Option Reserve	Reverse Acquisition Reserve	Merger Relief Reserve	Retained Earnings	Total Equity
	£	£	£	£	£	£	£
<b>Balance at 1 January 2019</b>	<b>8,634,675</b>	<b>9,328,848</b>	<b>81,909</b>	<b>(14,138,244)</b>	<b>279,347</b>	<b>(3,306,591)</b>	<b>879,944</b>
Total comprehensive loss for the period	-	-	-	-	-	(552,160)	<b>(552,160)</b>
Share issue	42,000	958,000	-	-	-	-	<b>1,000,000</b>
Share option reserve	-	41,949	(41,949)	-	-	-	-
Share based payment	-	-	1,181	-	-	-	<b>1,181</b>
<b>At 30 June 2019</b>	<b>8,676,675</b>	<b>10,328,797</b>	<b>41,141</b>	<b>(14,138,244)</b>	<b>279,347</b>	<b>(3,858,751)</b>	<b>1,328,965</b>

**(ii) Six months ended 30 June 2018 - Unaudited**

	Share Capital	Share Premium	Share Option Reserve	Reverse Acquisition Reserve	Merger Relief Reserve	Retained Earnings	Total Equity
	£	£	£	£	£	£	£
<b>Balance at 1 January 2018</b>	<b>8,579,396</b>	<b>8,513,670</b>	<b>147,635</b>	<b>(14,138,244)</b>	<b>299,045</b>	<b>(2,121,748)</b>	<b>1,279,754</b>
Total comprehensive loss for the period	-	-	-	-	-	(542,355)	<b>(542,355)</b>
Share issue	55,279	794,179	-	-	(19,698)	-	<b>829,760</b>
Share option reserve	-	-	(45,356)	-	-	-	<b>(45,356)</b>
<b>At 30 June 2018</b>	<b>8,634,675</b>	<b>9,307,849</b>	<b>102,279</b>	<b>(14,138,244)</b>	<b>279,347</b>	<b>(2,664,103)</b>	<b>1,521,803</b>

**N4 Pharma Plc and its controlled entities**  
**Condensed consolidated Statement of Changes in Equity (unaudited) for the six months ended 30 June 2019 (Continued)**

(iii) Twelve months ended 31 December 2018 -  
 Audited

	Share Capital	Share Premium	Share Option Reserve	Reverse Acquisition Reserve	Merger Relief Reserve	Retained Earnings	Total Equity
	£	£	£	£	£	£	£
<b>Balance at 1 January 2018</b>	<b>8,579,396</b>	<b>8,513,670</b>	<b>147,635</b>	<b>(14,138,244)</b>	<b>299,045</b>	<b>(2,121,748)</b>	<b>1,279,754</b>
Total comprehensive loss for the year	-	-	-	-	-	(1,184,843)	<b>(1,184,843)</b>
Share issue	55,279	815,178	-	-	(19,698)	-	<b>850,759</b>
Share option reserve	-	-	(65,726)	-	-	-	<b>147,635</b>
<b>At 31 December 2018</b>	<b>8,634,675</b>	<b>9,328,848</b>	<b>81,909</b>	<b>(14,138,244)</b>	<b>279,347</b>	<b>(3,306,591)</b>	<b>879,944</b>

The notes below form an integral part of these financial statements.



**N4 Pharma Plc and its controlled entities**  
**Condensed consolidated Statement of Cash Flows (unaudited) for the six months**  
**ended 30 June 2019**

	Six months to 30 June 2019 (Unaudited) £	Six months to 30 June 2018 (Unaudited) £	Twelve months to 31 December 2018 (Audited) £
<b>Operating activities</b>			
<b>Loss before tax</b>	(552,160)	(526,221)	(1,390,377)
Interest	1,587	535	981
Share based payments to employees	1,181	-	629
Gain on sale of investment	-	(27,693)	(27,693)
Taxation	-	(16,134)	-
<b>Operating loss before changes in working capital</b>	<b>(549,392)</b>	<b>(569,513)</b>	<b>(1,416,460)</b>
Movements in working capital:			
Decrease/(Increase) in trade and other receivables	11,445	4,425	(9,266)
(Decrease)/Increase in trade and other	(86,060)	13,728	10,905
Taxation	-	-	70,574
<b>Cash used in operations</b>	<b>(624,007)</b>	<b>(551,360)</b>	<b>(1,344,247)</b>
<b>Net cash flows used in operating activities</b>	<b>(624,007)</b>	<b>(551,360)</b>	<b>(1,344,247)</b>
<b>Investing activities</b>			
Proceeds from sale of investment	-	27,693	27,693
<b>Net cash flows from investing activities</b>	<b>-</b>	<b>27,693</b>	<b>27,693</b>
<b>Financing activities</b>			
Interest paid	(1,587)	(535)	(981)
Net proceeds of ordinary share issue	1,000,000	784,404	784,404
<b>Net cash flows from in financing activities</b>	<b>998,413</b>	<b>783,869</b>	<b>783,423</b>
<b>Net increase/ (decrease) in cash and cash</b>	<b>374,406</b>	<b>260,202</b>	<b>(533,131)</b>
Cash and cash equivalents at beginning of	<b>793,141</b>	1,326,272	1,326,272
<b>Cash and cash equivalents at 30 June / 31 December</b>	<b>1,167,547</b>	<b>1,586,474</b>	<b>793,141</b>

The notes below form an integral part of these financial statements.

# N4 Pharma Plc and its controlled entities

## Notes to the condensed consolidated interim financial statements for the six months ended 30 June 2019

### 1. Corporate information

N4 Pharma Plc (the “Company”) is the holding company for N4 Pharma UK Limited (“N4 UK”), and N4 Biotech Limited (“N4 Biotech”), and together form the group (the “Group”). N4 UK is a specialist pharmaceutical company engaged in the development of mesoparticulate silica delivery systems to improve the cellular delivery and potency of vaccines. The nature of the business is not deemed to be impacted by seasonal fluctuations and as such performance is expected to be consistent.

The Company is domiciled in England and Wales and was incorporated and registered in England and Wales on 6 July 1979 as a public limited company and its shares are admitted to trading on AIM (LSE: N4P). The Company’s registered office is located at 6th Floor, 60 Gracechurch Street, London, EC3V 0HR.

### 2. Accounting policies

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

The following IFRS standards, amendments or interpretations became effective in the six months to 30 June 2019 but have not had a material effect on this interim consolidated financial information:

IFRS 16	Leases
IFRIC 23	Uncertainty over Income Tax Treatments
IFRS 9	Prepayments Features with Negative Compensation
IAS 28	Long-term Interests in Associates and Joint Ventures
IAS19	Plan amendment, Curtailment and Settlement

The following relevant new standards, amendments to new standards and interpretations have been issued, but are not yet effective, and have not been early adopted:

Title	As Issued by the IASB, mandatory for accounting periods starting
Amendments to Reference to the Conceptual Framework in IFRS Standards	Accounting periods beginning on or after 1 January 2020

#### Basis of Preparation:

The Group’s condensed consolidated interim financial statements, which are unaudited, have been prepared in accordance with International Accounting Standard (“IAS”) 34, “Interim Financial Reporting”.

The annual financial statements for the year ended 31 December 2018 were prepared in accordance with International Financial Reporting Standards (“IFRS”) as adopted by the European Union.

The interim consolidated financial information for the six months ended 30 June 2019 are unaudited. In the opinion of the Directors, the interim consolidated financial information presents fairly the financial position, and results from operations and cash flows for the period.

The financial statements are presented in sterling, which is the Group’s functional currency as the UK is the primary environment in which it operates.

#### Basis of consolidation:

These consolidated financial statements have been prepared in accordance with IFRS 2 for both the comparative six month period ended 30 June 2018 and the current period ended 30 June 2019. These consolidated financial statements have been prepared in accordance with IFRS 2 as a result of the consolidation of the Company and N4 UK, constituting a reverse takeover transaction.

#### **Significant Accounting Policies:**

The condensed, consolidated interim financial statements have been prepared under the historical cost convention, with the exception of investments, in accordance with International Financial Reporting Standards ('IFRS') as adopted by the European Union.

While the financial information has been prepared in accordance with IFRS, as adopted by the European Union, the interim condensed, consolidated financial statements do not contain sufficient information to comply with IFRSs.

#### Financial assets at fair value through profit or loss:

Financial assets designated at fair value through profit or loss at inception are financial instruments that are not classified as held for trading but are managed, and their performance is evaluated on a fair value basis in accordance with the Group's documented investment strategy.

The Group's policy requires the Board of Directors to evaluate the information about these financial assets on a fair value basis together with other related financial information.

#### Segmental reporting:

The Group operated in one business segment, that of the development and commercialisation of medicines via its delivery system called Nuvec®. No revenue has yet been generated by any of the work undertaken by the Group.

The Directors consider that there are no identifiable business segments that are subject to risks and returns different to the core business. The information reported to the Directors, for the purposes of resource allocation and assessment of performance, is based wholly on the overall activities of the Group.

#### Cash and cash equivalents:

The Directors consider any cash on short term deposit and other short term investments to be cash equivalents.

#### Government grant income

Government grants are recognised only when there is reasonable assurance that the Company will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in the income statement on a systematic basis over the periods in which the Company recognises and expenses the related costs for which the grants are intended to compensate.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Company with no future related costs are recognised in the income statement in the period in which they become receivable.

#### Tax

The Group has accumulated losses available to carry forward against future trading profits. No deferred tax asset has been recognised in respect of tax losses since it is uncertain at the balance sheet date as to whether future profits will be available against which the unused tax losses can be utilised.

#### Share-based payment arrangements

Equity-settled share-based payments are measured at fair value at the date of grant using a Black Scholes pricing model. The key assumptions used in the model have been adjusted, based on management's best estimate, for the effects of non-transferability, exercise restrictions and behavioural considerations.

Cancellations of equity instruments are treated as an acceleration of the vesting period and any outstanding charge is recognised in full immediately.

### 3. Critical accounting judgements and estimates

The preparation of the interim condensed consolidated financial statements in conformity with IFRS requires management to make certain estimates, assumptions and judgements that affect the application of accounting policies and the reported amounts of assets and liabilities and the reported amounts of income and expenses during the reporting period.

In the process of applying the Group's accounting policies, management have decided that there are no estimates and assumptions significant to causing potentially material adjustments to the carrying amounts of assets and liabilities recognised in the condensed consolidated financial statements.

### 4. Share Capital

	30 June 2019 (Unaudited)	30 June 2018 (Unaudited)	31 Dec 2018 (Audited)
	£	£	£
<b><i>Allotted, called up and fully paid</i></b>			
101,462,537 Ordinary Shares of 0.4p each (30 June 2018 and 31 December 2018:	405,850	363,850	363,850
90,962,537 Ordinary shares of 0.4p each)			
137,674,431 Deferred Shares of 4p each (30 June 2018 and 31 December 2018:	5,506,977	5,506,977	5,506,977
137,674,431 Deferred shares of 4p each)			
279,176,540 Deferred Shares of 0.099p each (30 June 2018 and 31 December 2018:	2,763,848	2,763,848	2,763,848
279,176,540 Deferred shares of 0.099p each)			
	<b>8,676,675</b>	<b>8,634,675</b>	<b>8,634,675</b>

The transactions that took place during the period were as follows:

- 10,500,000 new ordinary shares of 0.4p each were issued.

All ordinary shares rank equally in all respects, including for dividends, shareholder attendance and voting rights at meetings, on a return of capital and in a winding-up.

The 137,674,431 deferred shares of 4p, have no right to dividends nor do the holders thereof have the right to receive notice of or to attend or vote at any general meeting of the Company. On a return of capital or on a winding up of the Company, the holders of the deferred shares shall only be entitled to receive the amount paid up on such shares after the holders of the ordinary shares have received the sum of £1,000,000 for each ordinary share held by them.

### 5. Reserves

The share premium account represents the amount received on the issue of ordinary shares by the Company in excess of their nominal value and is non-distributable.

The merger relief reserve arose on the Company's acquisition of N4 UK and consists of both the consideration shares and deferred consideration amounting to £299,045. There is no legal share premium on the shares issued as

consideration as section 612 of the Companies Act 2006, which deals with merger relief, applies in respect of the acquisition.

The reverse acquisition reserve arises due to the elimination of the Company's investment in N4 UK. Since the shareholder in N4 UK became a shareholder of the Company, the acquisition is accounted for as though the legal acquiree (N4 UK) is the accounting acquirer.

## 6. Share-based payments and Share Option Reserve

### a) Options

The Company has the ability to issue options to Directors to compensate them for services rendered and incentivise them to add value to the Group's longer term share value. Equity settled share-based payments are measured at fair value at the date of grant.

Cancellations of equity instruments are treated as an acceleration of the vesting period and any outstanding charge is recognised in full immediately.

Fair value is measured using a Black Scholes pricing model. The key assumptions used in the model have been adjusted based on management's best estimate for the effects of non-transferability, exercise restrictions and behavioural considerations.

As at 30 June 2019, there were 7,679,370 (30 June 2018: 6,245,084, 31 December 2018: 7,249,084) options in existence over ordinary shares of the Company.

On 14 October 2015, 10,804,840 and 2,701,210 share options were granted to Gavin Burnell, (the Company's former chief executive) and Luke Cairns respectively. Following the post-Share Re-Organisation, including the consolidation of shares and subsequent sub-division, these options now equate to a quarter of the original options issued. The 2,701,210 options held by Gavin Burnell and the 675,302.50 options held by Luke Cairns, issued on 14 October 2015 are exercisable at a price of 0.7p per share (pre-Share Re-Organisation) at any time before 14 October 2025.

The aggregate fair value of the share options issued on 14 October 2015 as at 30 June 2019 is £19,385 (30 June 2018: £23,636, 31 December 2018: £20,910).

Following the RTO and subsequent re-admission to AIM on 3 May 2017 ("Admission"), the following options over new ordinary shares were granted under the Company's share option scheme and are exercisable at a price of 7p per share:

Luke Cairns	717,143 options
David Templeton	717,143 options
Paul Titley	1,434,286 options

The above share options are exercisable following the third anniversary of Admission, being 3 May 2020.

In the case of Paul Titley, the exercise of options over 717,143 ordinary shares were subject to certain performance conditions. These options were exercisable at a price of 7 pence per share (post-Share Re-Organisation) at any time before 14 October 2025. However, these share options lapsed prior to the interim reporting date of 30 June 2019 due to his departure from the Company and those targets not being met. This leaves Paul Titley with 717,143 options which are exercisable on the 3<sup>rd</sup> anniversary of Admission, being 3 May 2020.

The fair value of the share options issued on 3 May 2017 and not yet exercised as at 30 June 2019 is £7,550 (30 June 2018: £6,040, 31 December 2018: £26,040).

On 26 September 2018 the following options over ordinary shares were granted under the Company's share option scheme and are exercisable at a price of 6.60p per share:

Andrew Leishman	286,857 options
Allan Hey	717,143 options

The share options granted to Andrew Leishman have now lapsed due to his departure from the Company.

The fair value of the share options issued on 26 September 2018 and not yet exercised as at 30 June 2019 is £21,887, (31 December 2018: £26,950).

On 21 May 2019 the following options over ordinary shares were granted under the Company's share option scheme and are exercisable at a price of 3.55p per share:

John Chiplin	717,143 options
Chris Britten	717,143 options

The fair value of the share options issued on 21 May 2019 and not yet exercised as at 30 June 2019 is £22,793.

## b) Warrants

As at 30 June 2019, the total number of warrants in issue was nil (30 June 2018: 11,054,071, 31 December 2018: 11,054,071).

The remaining warrants were exercisable at 8.5p and entitled holders to subscribe for new ordinary shares at any time in the period of two years following the grant of the warrants. These all relate to the warrants issued as part of the Placing on 3 May 2017. The expiry date of the placing warrants was 3 May 2019.

Details of the lapsed warrants during the period are as follows:

During the period, an amount of £54,329, representing the fair value of the remaining 11,054,071 warrants that have lapsed in the period, has been recognised against the share option reserve and share premium. The fair value of the warrants in issue and not yet exercised was determined using the Black Scholes model. The fair value of the warrants at 30 June 2019 was nil (30 June 2018: £54,329, 31 December 2018: £54,329).

## 8. Earnings per share

Basic earnings per share is calculated by dividing the loss after tax attributable (excluding the deemed cost of acquisition) to the equity holders of the Company by the weighted average number of shares in issue during the period.

Diluted earnings per share is calculated by adjusting the weighted average number of shares outstanding to assume conversion of all potential dilutive shares, namely share options and warrants.

## 9. Related Party Transactions

During the period to 30 June 2019, the non-executive directors' fees amounted to £27,894 (6 months to 30 June 2018: £24,000, 12 months to 31 December 2018: £48,000).

During the period to 30 June 2019, the Company charged N4 UK £12,000 in respect of 50 per cent. of the post RTO fees paid to non-executive directors for the services rendered to N4 UK (6 months to 30 June 2018: £12,000, 12 months to 31 December 2018: £24,000)

## 10. Subsequent events

The Board are in the process of winding up N4 Biotech Limited, a 100% owned subsidiary of N4 Pharma Plc. Subsequent to the interim financial statements date of 30 June 2019 the bank account has been closed and it is the Boards intention that N4 Biotech will be wound up fully prior to the year end.

Aside from the item disclosure there are no other significant subsequent events that require adjustment or disclosure in these interim condensed consolidated financial statements.