12 September 2023

**N4 Pharma Plc**

**("N4 Pharma" or the "Company")**

**Interim Results**

N4 Pharma Plc (AIM: N4P), the specialist pharmaceutical company developing Nuvec®, a novel delivery system for oncology, gene therapy and vaccines, announces its unaudited interim results for the six months ended 30 June 2023.

## Highlights:

- Encouraging performance demonstrated in *in vitro* studies evaluating Nuvec® loaded with two different clinically relevant siRNA, epidermal growth factor receptor (EGFR) and BCL-2, namely induction of apoptosis, similar to commercially available small molecules
- Successful demonstration of oral delivery of Nuvec® loaded with a DNA plasmid in an animal model into the intestine to produce transfection
- Second Nuvec® patent granted in the US bringing this territory in line with Europe, China and Japan, resulting in strong IP protection in key territories around the world
- Reduced operating loss for the period to £646,150 (30 June 2022: £750,102) and R&D and general expenditure in line with budget
- Cash position remains strong which at 30 June 2023 was £1,289,769 (31 December 2022: £1,919,529), again in line with budget

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

"We have continued to make excellent progress in the period with our pre-clinical work. In addition, our IP position has strengthened considerably with the granting of the second US patent. Encouraging results from our existing data package has prompted further exploratory conversations with potential collaborators.

"We believe in being prudent with our cash resources as far as possible whilst continually progressing our pre-clinical proof of concept data package with ongoing refinements to meet potential collaborators' requirements. In addition, we consider that focussing on our own product development (whether in partnership or on our own) for the continued development of Nuvec® is the right strategy for a company of our size. Nuvec® remains an exciting technology with huge potential as an alternate system for the delivery of nucleic acid-based therapies."

*The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 which has been incorporated into UK law by the European Union (Withdrawal) Act 2018. Upon the publication of this announcement via Regulatory Information Service, this inside information is now considered to be in the public domain.*

Enquiries:


| | |
|---|---|
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**About N4 Pharma**

N4 Pharma is a specialist pharmaceutical company developing a novel delivery system for oncology, gene therapy and vaccines using its unique silica nanoparticle delivery system called Nuvec®.

N4 Pharma's business model is to partner with companies developing novel antigens in these fields to use Nuvec® as the delivery vehicle for these antigens. As these products progress through pre-clinical and clinical programs, N4 Pharma will seek to receive upfront payments, milestone payments and ultimately royalty payments once products reach the market.

## Chairman's Statement

### Half year results

I am pleased to report that in the six months ended 30 June 2023, the operating loss for the period has reduced to £646,150 (30 June 2022: £750,102) and R&D and general costs are in line with planned expenditure.

Our cash balance at 30 June 2023 was £1,289,769 (31 December 2022: £1,919,529), again in line with budget.

### Operational update

The Company has continued to add further pre-clinical proof of concept data to the significant data accumulated in the preceding periods in respect of the potential for the use of Nuvec®. The Company's focus for 2023 was threefold:

- to continue to expand its knowledge around Nuvec® in oncology and gene therapy using siRNA to silence genes;
- to further explore the oral delivery of Nuvec® to the intestine to effect both local and systemic responses; and
- to investigate the use of Nuvec® to improve the performance of established, commercially-used viral vectors

*siRNA*

Having previously demonstrated the successful loading and gene silencing of Nuvec® loaded with two different generic siRNA, GFP (Green Fluorescent protein) and EHMT-2 (Euchromatic Histone Lysine Methyltransferase 2), we have progressed in this period to show how Nuvec® can load two clinically-relevant siRNA, epidermal growth factor receptor (EGFR) and BCL-2. We have demonstrated *in vitro* how each of these can be loaded onto Nuvec® and silence their respective genes producing similar apoptosis results to two commercially available small molecule drugs, Gefitinib for EGFR and Venetoclax for BCL-2.

The Company is continuing to investigate these siRNA along with other potential candidates to continue to build the knowledge base that best showcases the potential of Nuvec® as a multiple loading nanoparticle that can deliver its dual or multiple payloads into individual cells.

*Oral Studies at the University of Queensland ("UQ")*

During the period, utilising the grant funding, UQ has made considerable progress in the longer-term study on oral applications for Nuvec®. We have demonstrated via *in vivo* pre-clinical studies that Nuvec®, loaded with McCherry DNA and formulated and administered in capsules, is able to pass into the small intestine and successfully transfect cells in the small intestine. We are now investigating the optimum dosage and timing to assess the duration of the effect in the intestinal mucosa.

The data emerging from the oral studies clearly shows the potential for Nuvec® in this space which will make the development of a product for the appropriate commercial market that much clearer. For example, for oral use conventional capsule technology will allow targeted release in the colon to provide local administration of SiRNA against key factors involved in Inflammatory Bowel Disease ("IBD"). We are looking at models to test this proof of concept in IBD currently. Similarly, there are animal models available to explore the treatment of colon cancer. We look forward to making further announcements on our oral studies as soon as they are available.

*Viral Vectors*

The market for manufacturing viral vectors, in terms of revenue, was estimated to be worth $5.5 billion in 2023 and is poised to reach $12.8 billion by 2028, growing at a CAGR of 18.2% from 2023 to 2028 according to a report by Markets and Markets. This is being fuelled by major investment in the gene therapy market.

Viral Vectors remain the "go to" delivery vehicle for use in gene therapy but they remain fraught with problems, including the high cost of goods and the risk of side effects due to their inflammatory nature. As a result, companies operating in this space are increasingly looking at non-viral delivery systems that can be used to replace viral vectors.

The Company believes that Nuvec® is able to address this area and it has taken a novel approach as to how Nuvec® might initially be used. Whilst Nuvec® has the potential to replace viral vectors as a delivery vehicle, the Company has shown that Nuvec® can be combined with the viral vector to significantly improve its efficiency. The Company has shown that Nuvec® loaded with an adenovirus viral vector can increase performance of the viral vector by 20-30 fold. This preliminary data suggests that products formulated with viral vectors could achieve the same efficacy using a reduced amount of viral vector, thereby significantly reducing the cost of manufacture and potentially reducing the unwanted side effects from the viral vector.

The Company is continuing to investigate this in collaboration with Brunel University and is now investigating the improvement of Adeno Associated Viruses (AAV).

## Intellectual Property

During this period UQ informed the Company that it had been notified by the US Patent Attorney of the granting of its second patent application in relation to Nuvec® in the United States. This patent is for the matter of composition of the nanoparticle and follows the previous grant on how Nuvec® is made. This now brings the US alongside Europe, China and Japan. The granting of patents in these large markets gives the Company strong intellectual property protection in key territories around the world - a vital component for potential licensing deals.

## New opportunities

The Company is continuing to investigate new opportunities to compliment Nuvec® and expand its portfolio of IP and further its strategy to bring a product into clinical development. Progress continues and we will announce as and when further developments are made.

## Outlook and strategy

As we are a small company, we are mindful how we spend our resources. Our focus is predominantly in conducting *in vitro* proof of concept work and we have made huge progress, most recently with our siRNA programme. In addition, we have generated excellent data for the use of Nuvec® to enhance viral vectors to support our ongoing patent application in this area. Our *in vivo* work is continuing to make progress, albeit slower than we anticipated, but it is important to get this work right and we will be patient and diligent in doing this.

In Nuvec®, we undoubtedly have an exciting technology that we have proven is easy to load with any nucleic acid, protects its payload and efficiently delivers it intracellularly. We have also shown how we can formulate potential products with Nuvec® and store it lyophilised for up to six months (to date) without any loss in performance of the payload.

Our business development outreach is ongoing, sharing the data we have with potential collaborators yet we realise the quickest way to get Nuvec® into clinic may be to do this ourselves in a step-by-step manner. We are considering how we might formulate an siRNA product for a combination therapy using multiple loaded siRNA, thereby utilising the direct competitive advantages Nuvec® has ourselves. We are also looking at the prospect of using our oral delivery work for a potential IBD product and we will also continue our acquisition search for new opportunities that might enable us to get into clinic as soon as possible.

Post period end, John Chiplin retired from the Board as Non-Executive Chairman and I assumed the role as Chairman. On behalf of myself and fellow directors, we thank John for his contributions over the years and wish him and his family all the very best for the future. As per our corporate governance policy, we are in the process of finding a new non-executive director to bring the appropriate skills to the Company and will advise when this is completed.

Finally, 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.

Chris Britten
Chairman
12 September 2023

## N4 Pharma Plc and its controlled entities
## Condensed Consolidated Interim Statement of Comprehensive Income (unaudited) for the six months ended 30 June 2023

| | Six months to 30 June 2023 (Unaudited) £ | Six months to 30 June 2022 (Unaudited) £ | Twelve months to 31 December 2022 (Audited) £ |
|---|---|---|---|
| **Expenses** | | | |
| Research and development costs | (192,630) | (411,417) | (577,525) |
| General and administration costs | (452,276) | (338,019) | (615,735) |
| **Operating loss for the period** | (644,906) | (749,436) | (1,193,260) |
| Finance (expenditure)/income | (1,244) | (666) | 1 |
| **Loss for the period before tax** | (646,150) | (750,102) | (1,193,259) |
| Taxation | - | - | 163,998 |
| **Loss for the period after tax** | (646,150) | (750,102) | (1,029,261) |
| Other comprehensive income net of tax | - | - | - |
| **Total comprehensive loss for the period attributable to equity owners of N4 Pharma Plc** | **(646,150)** | **(750,102)** | **(1,029,261)** |
| **Loss per share attributable to owners of the parent** | | | |
| Weighted average number of shares: | | | |
| Basic | 233,780,349 | 181,080,349 | 186,422,541 |
| Diluted | 233,780,349 | 181,080,349 | 186,422,541 |
| Basic loss per share | **(0.28p)** | **(0.41p)** | **(0.55p)** |
| Diluted loss per share | **(0.28p)** | **(0.41p)** | **(0.55p)** |

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 Interim Statement of Financial Position (unaudited) for the six months ended 30 June 2023

| | Notes | 30 June 2023 (Unaudited) £ | 30 June 2022 (Unaudited) £ | 31 December 2022 (Audited) £ |
|---|---|---|---|---|
| **Assets** | | | | |
| **Current assets** | | | | |
| Trade and other receivables | | 209,447 | 27,804 | 246,518 |
| Cash and cash equivalents | | 1,289,769 | 1,579,948 | 1,919,529 |
| | | 1,499,216 | 1,607,752 | 2,166,047 |
| **Total Assets** | | 1,499,216 | 1,607,752 | 2,166,047 |
| **Liabilities** | | | | |
| **Current liabilities** | | | | |
| Trade and other payables | | (14,856) | (158,157) | (40,722) |
| Accruals and deferred income | | (38,921) | (62,612) | (37,167) |
| **Total assets less current liabilities** | | 1,445,439 | 1,386,983 | 2,088,158 |
| **Net Assets** | | **1,445,439** | **1,386,983** | **2,088,158** |
| **Equity** | | | | |
| Share capital | 4 | 9,205,946 | 8,995,146 | 9,205,946 |
| Share premium | 5 | 14,698,569 | 13,945,602 | 14,698,569 |
| Share option reserve | 6 | 107,385 | 87,387 | 103,954 |
| 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 | | (8,707,564) | (7,782,255) | (8,061,414) |
| **Total Equity** | | **1,445,439** | **1,386,983** | **2,088,158** |

## N4 Pharma Plc and its controlled entities
## Condensed Consolidated Interim Statement of Changes in Equity (unaudited) for the six months ended 30 June 2023

**(i) Six months ended 30 June 2023 - Unaudited**

| | Share Capital | Share Premium | Share Option Reserve | Reverse Acquisition Reserve | Merger Relief Reserve | Retained Earnings | Total Equity |
|---|---|---|---|---|---|---|---|
| | £ | £ | £ | £ | £ | £ | £ |
| **Balance at 1 January 2023** | **9,205,946** | **14,698,569** | **103,954** | **(14,138,244)** | **279,347** | **(8,061,414)** | **2,088,158** |
| Total comprehensive loss for the period | - | - | - | - | - | (646,150) | **(646,150)** |
| Share option reserve | - | - | 3,431 | - | - | - | **3,431** |
| **At 30 June 2023** | **9,205,946** | **14,698,569** | **107,385** | **(14,138,244)** | **279,347** | **(8,707,564)** | **1,445,439** |

**(ii) Six months ended 30 June 2022 - Unaudited**

| | Share Capital | Share Premium | Share Option Reserve | Reverse Acquisition Reserve | Merger Relief Reserve | Retained Earnings | Total Equity |
|---|---|---|---|---|---|---|---|
| | £ | £ | £ | £ | £ | £ | £ |
| **Balance at 1 January 2022** | **8,995,146** | **13,945,602** | **79,955** | **(14,138,244)** | **279,347** | **(7,032,153)** | **2,129,653** |
| Total comprehensive loss for the period | - | - | - | - | - | (750,102) | **(750,102)** |
| Share option reserve | - | - | 7,432 | - | - | - | **7,432** |
| **At 30 June 2022** | **8,995,146** | **13,945,602** | **87,387** | **(14,138,244)** | **279,347** | **(7,782,255)** | **1,386,983** |

## N4 Pharma Plc and its controlled entities
## Condensed Consolidated Interim Statement of Changes in Equity (unaudited) for the six months ended 30 June 2023 (continued)

**(iii) Twelve months ended 31 December 2022 - Audited**

| | Share Capital | Share Premium | Share Option Reserve | Reverse Acquisition Reserve | Merger Relief Reserve | Retained Earnings | Total Equity |
|---|---|---|---|---|---|---|---|
| | £ | £ | £ | £ | £ | £ | £ |
| **Balance at 1 January 2022** | **8,995,146** | **13,945,602** | **79,955** | **(14,138,244)** | **279,347** | **(7,032,153)** | **2,129,653** |
| Total comprehensive loss for the year | - | - | - | - | - | (1,029,261) | **(1,029,261)** |
| Share issue | 210,800 | 843,200 | - | - | - | - | **1,054,000** |
| Share issue cost | | (90,233) | - | - | - | - | **(90,233)** |
| Share option reserve | - | - | 23,999 | - | - | - | **23,999** |
| **At 31 December 2022** | **9,205,946** | **14,698,569** | **103,954** | **(14,138,244)** | **279,347** | **(8,061,414)** | **2,088,158** |

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

## N4 Pharma Plc and its controlled entities
## Condensed Consolidated Interim Statement of Cash Flows (unaudited) for the six months ended 30 June 2023

| | Six months to 30 June 2023 (Unaudited) £ | Six months to 30 June 2022 (Unaudited) £ | Twelve months to 31 December 2022 (Audited) £ |
|---|---|---|---|
| **Operating activities** | | | |
| **Loss after tax** | (646,150) | (750,102) | (1,029,261) |
| Finance expenditure | 1,244 | 666 | (1) |
| Share based payments to employees | 3,431 | 7,432 | 23,999 |
| Taxation credit | - | - | (163,998) |
| **Operating loss before changes in working capital** | **(641,475)** | **(742,004)** | **(1,169,261)** |
| Movements in working capital: | | | |
| Decrease/ (increase) in trade and other receivables | 37,070 | 530,555 | (37,312) |
| (Decrease)/increase in trade payables and accruals | (24,111) | 8,039 | (134,841) |
| **Cash used in operations** | (628,516) | (203,410) | (1,341,414) |
| Taxation credit received | - | - | 513,151 |
| **Net cash flows used in operating activities** | **(628,516)** | **(203,410)** | **(828,263)** |
| **Financing activities** | | | |
| Finance (expenditure)/income | (1,244) | (666) | 1 |
| Proceeds of ordinary share issue | - | - | 1,054,000 |
| Costs of share issue | - | - | (90,233) |
| **Net cash flows (used in)/from financing activities** | **(1,244)** | **(666)** | **963,768** |
| **Net decrease/increase in cash and cash equivalents** | **(629,760)** | **(204,076)** | **135,505** |
| Cash and cash equivalents at beginning of the period/ year | 1,919,529 | 1,784,024 | 1,784,024 |
| **Cash and cash equivalents at 30 June/ 31 December** | **1,289,769** | **1,579,948** | **1,919,529** |

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

# N4 Pharma Plc and its controlled entities
# Notes to the condensed interim financial statements for the six months ended 30 June 2023

## 1. Corporate Information

N4 Pharma Plc (the "Company") is the holding company for N4 Pharma UK Limited ("N4 UK"), 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 standards and interpretations that are issued, but not yet effective, up to the date of the issuance of the consolidated interim financial statements are disclosed below. The Group intends to adopt these standards, if applicable, when they become effective.

| Title | As Issued by the IASB, mandatory for accounting periods starting |
|---|---|
| Amendments to IAS 1: Classification of Liabilities as Current or Non-Current | Accounting periods beginning on or after 1 January 2024 |

**Basis of Preparation:**

The Group's condensed consolidated interim financial statements have been prepared in accordance with International Accounting Standard ("IAS") 34, "Interim Financial Reporting".

The annual consolidated financial statements for the year ended 31 December 2022 were prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union.

The condensed consolidated interim financial information for the six months ended 30 June 2023 are unaudited. In the opinion of the Directors, the condensed consolidated interim financial information presents fairly the financial position, and results from operations and cash flows for the period.

These condensed consolidated interim financial statements been prepared on the basis of accounting principles applicable to a going concern. The Directors consider that the Group will have access to adequate resources, to meet the operational requirements for at least 12 months from the date of approval of these condensed consolidated interim financial statements. For this reason, they continue to adopt the going concern basis in preparing the condensed consolidated interim financial statements.

**2. Accounting policies (continued)**

**Basis of Preparation: (continued)**

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 condensed consolidated interim 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, for the comparative six month period ended 30 June 2022 and the comparative twelve month period to 31 December 2022 and the current six month period ended 30 June 2023.

**Significant Accounting Policies:**

The condensed consolidated interim financial statements have been prepared under the historical cost convention, as modified for the following items, in accordance with International Financial Reporting Standards ('IFRS') as adopted by the European Union:

- Share-based payments related to investment acquisition are measured at fair value shown in the Merger Reserve.
- Share-based payments related to employee costs are measured at fair value shown in the Statement of Comprehensive Income.
- The associated Share Options are measured at fair value using the Black Scholes model (see note 9).

All accounting policies are consistent with those applied in the Annual Report and there have been no amendments or changes in accounting policies during the period.

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.

*Seasonality*
The nature of the business is not deemed to be impacted by seasonal fluctuations and as such performance is expected to be consistent.

**3. Critical Accounting Judgements and Estimates**

The preparation of the condensed consolidated interim 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.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

### 3. Critical Accounting Judgements and Estimates (continued)

In the process of applying the Group's accounting policies, management has decided the following estimates and assumptions are material to the carrying amounts of assets and liabilities recognised in the condensed consolidated interim financial statements.

**Critical judgements**

**Research and development expenditure**

The key judgements surrounding the Research & Development expenditure is whether the expenditure meets the criteria for capitalisation. Expenditure will only be capitalised when the recognition criteria is met and is otherwise written off to the Consolidated Statement of Comprehensive Income. The recognition criteria include the identification of a clearly defined project with separately identifiable expenditure where the outcome of the project, in terms of its technical feasibility and commercial viability, can be measured or assessed with reasonable certainty and that sufficient resources exist to complete a profitable project. In the event that these criteria are met, and it is probable that future economic benefit attributable to the product will flow to the Group, then the expenditure will be capitalised.

**Impairment of investments and intercompany debtors**

N4 UK has sustained losses and the Statement of Financial position is in deficit. The recoverability of the intercompany debtor and the cost of investment is dependent on the future profitability and success of the entity, which is in a research phase and has not therefore generated any revenue to date. Having considered research progress during the period and future prospects of N4 UK, the Directors do not consider that there are indicators of impairment in respect of these balances. This is a significant judgement.

### 4. Share Capital

| ***Allotted, called up and fully paid*** | **30 June 2023 (Unaudited)** | **30 June 2022 (Unaudited)** | **31 Dec 2022 (Audited)** |
|---|---|---|---|
| | £ | £ | £ |
| 233,780,349 Ordinary Shares of 0.4p each (30 June 2022: 181,080,379 and 31 December 2022: 233,780,379 Ordinary shares of 0.4p each) | 935,121 | 724,321 | 935,121 |
| 137,674,431 Deferred Shares of 4p each (30 June 2022 and 31 December 2022: 137,674,431 Deferred shares of 4p each) | 5,506,977 | 5,506,977 | 5,506,977 |
| 279,176,540 Deferred Shares of 0.099p each (30 June 2022 and 31 December 2022: 279,176,540 Deferred shares of 0.099p each) | 2,763,848 | 2,763,848 | 2,763,848 |
| | **9,205,946** | **8,995,146** | **9,205,946** |

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.

**4. Share Capital (continued)**

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.

The 279,176,540 deferred shares of 0.99p shall be entitled to receive a special dividend, which is payable upon the repayment to the Company of any amount owed under certain loan agreements, after which the Company shall, in priority to any distribution to any other class of share, pay to the holders of the Special Deferred Shares an aggregate amount equal to the amount repaid pro rata according to the number of such shares paid up as to their nominal value held by each shareholder. They shall be entitled to no other distribution save for a special dividend and shall not be entitled to receive notice of or attend or vote at a general meeting of the Company. On a return of capital on a winding up of the Company, they shall only be entitled to receive the amount paid up on such shares up to a maximum of 0.9 pence per share after the holders of the Ordinary Shares and the Deferred Shares have received their return on capital.

**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 issue costs 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 £279,347. 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**

**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. The fair value determined is charged to the Comprehensive Income Statement on a straight-line basis over the vesting period based on the Group's estimate of the number of shares that will vest.

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 behavioral considerations. The inputs into the model were as follows:

**6. Share-based Payments and Share Option Reserve (continued)**

**Options (continued)**

| | 2017 Options | 2018 Options | 2019 Options | 2020 Options |
|---|---|---|---|---|
| Share price | 6.375p | 6.6p | 3.55p | 4.8p |
| Exercise price | 7p | 6.6p | 3.55p | 4.8p |
| Expected volatility | 27.2% | 45.2% | 37.4% | 29.9% |
| Expected option life | 3 years | 6.5 years | 6.5 years | 6.5 years |
| Risk free rate | 4.75% | 5.00% | 5.00% | 5.00% |

As at 30 June 2023, there were 7,046,513 (30 June 2022: 7,046,513, 31 December 2022: 7,046,513) options in existence over ordinary shares of the Company.

Options in existence during the current and previous periods and year are as follows:

| Name | Date of Grant | Ordinary shares under option | Expiry Date | Exercise Price £ |
|---|---|---|---|---|
| **2015 Options** | | | | |
| Gavin Burnell | 14.10.15 | 1,351,210 | 14.10.25 | 0.0280 |
| Luke Cairns | 14.10.15 | 675,302 | 14.10.25 | 0.0280 |
| **2017 Options** | | | | |
| Luke Cairns | 03.05.17 | 717,143 | 03.05.27 | 0.0700 |
| David Templeton | 03.05.17 | 717,143 | 03.05.27 | 0.0700 |
| Paul Titley | 03.05.17 | 717,143 | 03.05.27 | 0.0700 |
| **2019 Options** | | | | |
| John Chiplin | 21.05.19 | 717,143 | 21.05.29 | 0.0355 |
| Christopher Britten | 21.05.19 | 717,143 | 21.05.29 | 0.0355 |
| **2020 Options** | | | | |
| David Templeton | 18.05.20 | 717,143 | 18.05.30 | 0.0480 |
| Luke Cairns | 18.05.20 | 717,143 | 18.05.30 | 0.0480 |
| **Total options** | | **7,046,513** | | |

Each option entitles the holder to subscribe for one ordinary share in N4 Pharma Plc. Options do not confer any voting rights on the holder.

**6. Share-based Payments and Share Option Reserve (continued)**

**Options (continued)**

The aggregate fair value of the share options issued is as follows:

| | 30 June 2023 (Unaudited) | 30 June 2022 (Unaudited) | 31 Dec 2022 (Audited) |
|---|---|---|---|
| | £ | £ | £ |
| **2015 Options** | 18,492 | 18,492 | 18,492 |
| **2017 Options** | 26,884 | 26,884 | 26,884 |
| **2019 Options** | 22,793 | 22,793 | 22,793 |
| **2020 Options** | 27,223 | 19,218 | 23,792 |
| | 95,392 | 87,387 | 91,691 |

**Warrants**

Warrants in existence during the current and previous year are the follows:

| Date of Grant | Ordinary shares under option | Expiry Date | Exercise Price £ | Fair value at 30 June 2023 £ |
|---|---|---|---|---|
| 25.11.22 | 3,162,000 | 24.11.25 | 0.02 | 11,993 |

The warrants entitle holders to subscribe for new ordinary shares at any time in the period of three years following the grant of the warrants. The expiry date for the warrants is 23 November 2025.

Fair value is measured using a Black Scholes pricing model.

An amount of £11,993 has been recognised in the Share Premium and in the Share Option Reserve in relation to the warrants (30 June 2022: £nil).

**7. 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.

**8. Related Party Transactions**

During the period to 30 June 2023, the non-executive directors' fees amounted to £24,000 (6 months to 30 June 2022: £24,000.00, 12 months to 31 December 2022: £48,000.00).

**9. Subsequent Events**

There are no significant subsequent events that require adjustment or disclosure in these condensed consolidated interim financial statements.