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N4 Pharma PLC
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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 ("MAR").

25 March 2020

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

Covid-19 Project Update and operational update

N4 Pharma Plc (AIM: N4P), the specialist pharmaceutical company developing Nuvec®, a novel delivery system for cancer treatments and vaccines, announces that it will be undertaking a proof of concept research project using a Covid-19 DNA plasmid for the purpose of demonstrating the ability of Nuvec® to be used as a delivery system by potential collaboration partners developing Covid-19 DNA or RNA vaccines.

Nuvec® is a silica nanoparticle with elongated silica spikes radiating from the core. This topography results in a high surface area which subsequently is coated with Polyethylenimine ("PEI"), resulting in a positively charged surface. It has been previously demonstrated that oligonucleotides including plasmid DNA and mRNA can be attached to the nanoparticle at high loading capacity. In both *in vitro* and *in vivo* test models, the loaded nanoparticle is taken up by cells involved in transfection/transduction processes resulting in the synthesis of foreign proteins and stimulation of the required immunological response.

The proof of concept work will show whether Nuvec® is capable of loading the Covid-19 plasmid and transfecting cells with the plasmid *in vitro*. Assuming successful *in vitro* transfection, the Company will then undertake a proof of concept *in vivo* study to demonstrate the improved transfection when using Nuvec®, compared to not using the delivery system, by measuring the production of the antigenic protein and antibodies generated against the encoded Covid-19 protein.

The Covid-19 DNA plasmid will be licensed from the National Institute for Health (NIH) in the USA and is the same plasmid provided to leading biotech companies and researchers already working on Covid-19 vaccines. The Company will appoint an experienced contract research organisation (CRO) that it has worked with previously to undertake the program of studies outlined above. Further details on timings will be notified as soon as they are available. It is important to note that N4 Pharma is not itself attempting to develop a vaccine for coronavirus, it is purely seeking to demonstrate whether Nuvec® could work as a delivery system for a vaccine when it is developed.

Operational impact of Covid-19 pandemic

The Company operates a virtual model, so most of its workforce typically either work from home or in small offices. Therefore, operationally, the Company has not been affected to date by the UK Government's requirements regarding social distancing and self-isolation.

Further, the Company has received confirmation that the main laboratories contracted by N4 Pharma to undertake research and those identified as partners for the Covid-19 work detailed above are implementing rota systems to enable key laboratory staff to stay and work on projects. As a result, there are no current significant delays to N4 Pharma's

announced work plan. This will be kept under close review in the coming months, as the situation evolves.

The Company's academic partner in Australia remains open, meaning N4 Pharma currently has a continued supply of Nuvec® for its research needs.

On 20 March 2020, the Company's academic partner in the UK announced it will be closed until after Easter. As this is a longer-term project, looking at stability testing and efficacy proof of concept of a DNA plasmid loaded on Nuvec® the Company does not expect this closure to greatly impact their program of work.

Nigel Theobald, Chief Executive Officer of the Company, commented:

"Developing a convincing proof of concept data package for Nuvec® is a key priority for the Company so demonstrating whether Nuvec® is capable of loading a plasmid DNA for the Coronavirus provides an opportunity to show the versatility and potential for our Nuvec® delivery system, and to license Nuvec® to partners looking to develop vaccines for this virus.

We are not doing this work to develop a vaccine for Coronavirus but rather to demonstrate to those working on these vaccines how Nuvec® may enhance any vaccine and could be beneficial for subsequent vaccines they may be looking to develop for this Coronavirus or other viruses that may well surface in the future."

Enquiries:

N4 Pharma Plc
Nigel Theobald, CEO — Via Scott PR

Allenby Capital Limited
James Reeve/Asha Chotai — Tel: +44(0)203 328 5656

Scott PR
Georgia Smith — Tel: +44(0)1477 539 539

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®.

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.

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