RNS Number : 8399Y
N4 Pharma PLC
08 January 2024

8th January 2024

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

AAV Viral Vector Update

N4 Pharma Plc (AIM: N4P), the specialist pharmaceutical company developing Nuvec®, a novel delivery system for cancer treatments, gene therapy and vaccines, is pleased to provide a further successful update on its ongoing research work into the use of Nuvec® to enhance the performance of viral vectors.

Through its research programme with the University of Brunel, the Company has demonstrated via a series of *in vitro* experiments that Nuvec® can deliver increased transduction efficacy, when complexed with Adeno-Associated virus 8 ("AAV8"). This follows on from earlier work where the Company showed that Nuvec® increased transduction efficacy of a standard Adenovirus vector.

Specifically, Nuvec® was mixed with AAV8 carrying a fluorescent green protein gene and used to transduce human-like liver cells (induced pluripotent cell model). When the viral vector was complexed with Nuvec®, transduction efficacy increased 2.5-fold compared to the AAV8 vector when used on a standalone basis. AAV8 was chosen for investigation as this virus is currently being used for products already in clinical development.

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

"The number of approvals of new gene therapies and the need for appropriate delivery systems have reached unprecedented highs and demand is growing exponentially. The AAV vector market alone (AAV based gene therapy and AAV manufacturing) is projected to grow from USD 1.9 billion in 2022 to USD 11.1 billion by 2035, a CAGR of 14%[1].

"For in vivo gene therapy, the Adenovirus (AV) and Adeno-Associated virus (AAV) are acknowledged as the most used delivery vehicles. However relatively high amounts of AV and AAV are needed to be clinically efficient and this appears directly correlated with adverse events in patients such as unwanted immunogenicity and potential safety implications.

"Our work shows that Nuvec® has the potential to reduce the amount of AV and AAV needed and thus decrease both the cost of goods and immunogenicity associated with using these viral vectors. We believe this will be a major focus of the pharma/biotech industry as these viral vector delivery systems are further investigated.

"This work is running in parallel to our ongoing oral and dual loading work as well as the Nanogenics' Glaucoma product, an update on which will follow soon."

[1]Adeno-Associated Viral Vectors / AAV Vector Market - Focus on AAV Based Gene Therapy and AAV Manufacturing by Type of Therapy, Type of Gene Delivery Method Used, Target Therapeutic Area, Application Area, Scale of Operation and Geographical Regions: Industry Trends and Global Forecasts, 2022-2035: Roots analysis.

For more information please contact:

N4 Pharma plc Nigel Theobald, CEO Luke Cairns, Executive Director	Via N4 Pharma Investor Hub
Engage with us directly at N4 Pharma Investor Hub	Sign up at investors.n4pharma.com
To hear more, visit	https://investors.n4pharma.com/link/2P2xwe
SP Angel Corporate Finance LLP *Nominated Adviser and Joint Broker* Matthew Johnson/Kasia Brzozowska (Corporate Finance)	Tel: +44(0)20 3470 0470

Vadim Alexandre/Abigail Wayne/Rob Rees (Corporate Broking)

Turner Pope Investments (TPI) Limited Tel: +44(0)20 3657 0050
Joint Broker
Andy Thacker
James Pope

IFC Advisory Ltd Tel: +44(0)20 3934 6630
Financial PR
Graham Herring
Zach Cohen

Glossary

AAV8 is an isolate from rhesus monkey tissue with high homology to other AAVs, but it has a liver cell transduction efficiency reported to be far greater than those of all others AAVs tested to date.

pluripotent cell model: The term "pluripotent" means capable of developing into differentiated cells. Pluripotent cells are the embryonic stem cells that have the unlimited capacity to divide, self-renew and differentiate into cells of early primary germ cell layers, namely mesoderm, endoderm, and ectoderm

transduction: the transfer of genetic material from one organism to another by a genetic vector

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.

For further information on the Company visit www.n4pharma.com or sign up at investors.n4pharma.com.

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