



Date: 3 November 2017

Sydney, Australia

ASX: NOX

Noxopharm Limited

ABN 50 608 966 123

Registered Office:

Suite 1 Level 6
50 Queen St
Melbourne VIC 3000
Australia

Operational Office:

Suite 3, Level 4
828 Pacific Highway
Gordon NSW 2072
Australia

Board of Directors

Mr Peter Marks

Chairman
Non-Executive
Director

Dr Graham Kelly

Chief Executive Officer
Managing Director

Dr Ian Dixon

Non-Executive
Director

ASX Limited
20 Bridge Street
SYDNEY NSW 2000

NOX/UNSW collaboration confirms drug designed to help stroke victims

- **Loss of brain function after stroke or concussion mainly due to secondary death of brain cells**
- **NYX-104 confirmed as inhibitor of this secondary process in animals**
- **NYX-104 being developed as a first-in-class neuroprotection drug to minimise loss of brain function following stroke, concussion and head trauma**
- **Significant opportunity to reduce rehabilitation times following stroke and head and spinal injury**
- **NYX-104 opportunity to be explained by UNSW scientists at EGM on 6 November 2017.**

Sydney, 3 November 2017: Noxopharm announced on 16 March 2017 that it had entered into a collaboration with UNSW Sydney to develop a drug designed to assist patients recovering from traumatic brain injury due to stroke, concussion, head trauma or severe epileptic seizure. The aim was to develop a drug to be given to a patient post-injury to limit knock-on, secondary brain damage and resulting loss of brain function, thereby increasing survival and reducing rehabilitation time and costs.

Noxopharm is pleased to confirm that the collaboration has identified a drug candidate known as NYX-104, with key proof-of-concept evidence of its ability to significantly reduce the area of brain death in a mouse model of human stroke.

The collaboration was made possible because of three important Australian scientific developments: (a) the discovery by a team of neuroscientists at UNSW Sydney of a key drug target in the secondary damage process; (b) the ability of Noxopharm to design a drug able to hit this target; and (c) the ability of Noxopharm then to deliver this drug across the blood-brain barrier via its LIPROSE technology.

The aim of NYX-104 is not to treat the original injury (eg. trauma, stroke etc), but to stop the cascade of death of nerve cells (known as *excitotoxicity*) that occurs in the brain and spinal cord after the initial injury and which can lead to an area of cell death many times that of the original injury. This 'follow-on damage' typically accounts for much of the loss of function and paralysis following such injuries.

Limiting this ‘follow-on damage’ is expected to make a significant difference to the recovery prospects of people following brain and spinal cord injury. Despite considerable effort there currently is no effective treatment of excitotoxicity.

The scientist leading the team of neuroscientists at UNSW Sydney, Professor Gary Housley, said, “The strong collaborative engagement with Noxopharm has been highly effective in enabling us to achieve the molecular targeting of this primary brain injury process and then validate the significant neuroprotection *in vivo*”.

Noxopharm CEO, Dr Graham Kelly, explained, “NYX-104 currently sits in one of our subsidiary companies. Pending shareholder approval at a General Meeting next Monday, that subsidiary will become part of a new US biotechnology company we have formed called Nyrada Inc that will focus on non-oncology drugs. Nyrada then will have responsibility for developing NYX-104.”

“The opportunity to bring a first-in-class drug into the clinic to treat excitotoxic injury in the nervous system is something that we believe will bring global prominence to Nyrada. Excitotoxicity is not only a critical condition, but can also be a progressive silent disease that affects many individuals and costs the community significant sums of money. The recent publicity about the deleterious effects of repeated concussion in footballers has brought it to public attention. But the full implications of this problem extend to the millions of people who suffer stroke, head and spinal injury, severe epileptic seizure and noise-induced hearing loss.”

Kelly added, “I would encourage shareholders and any others to attend the Company’s Extraordinary General Meeting next Monday, where they will learn about this exciting project in detail from Professor Housley, one of Australia’s most eminent neuroscientists.”

.....

Please Note: For organisational purposes please contact info@noxopharm.com to confirm attendance at the EGM on Monday 6 November at 10 am at the Noxopharm offices: Level 4, Suite 3, 828 Pacific Highway, Gordon.

.....

About Professor Housley

Gary Housley PhD holds the Chair of Physiology and is director of the Translational Neuroscience Facility, School of Medical Sciences, UNSW Sydney. His research program is broadly within molecular, cellular and systems physiology in the nervous system, particularly around neuroprotection and neural repair in the central nervous system and auditory system. He has contributed prominently to understanding how hearing is affected by noise and ageing. Study of neural development and synaptic plasticity in the auditory system informs on gene-targets for neural repair. This research has an applied arm with respect to bionics such as the cochlear implant which has led to development of an innovative gene therapy platform for auditory nerve regeneration. Within the brain, Housley's research group is investigating neural plasticity associated with driven input (e.g. via the cochlear implant) and mechanisms for neuromodulation, protection and repair of the nervous system (focusing of the role of calcium signalling in glutamate excitotoxicity, associated with ischaemic brain injury, stroke, epilepsy and trauma, alongside noise-induced hearing loss. Hearing loss is the most prominent sensory disability in our society. Stroke is the third highest killer and the most disabling for survivors. Professor Housley’s research is supported by national and international collaborations and funding.

About Excitotoxicity

Excitotoxicity refers to the process where healthy neurons (nerve cells) are killed largely as a result of an influx of calcium ions into the cell. The calcium influx is triggered by an outpouring of glutamate from damaged neurons, with the calcium activating a number of enzymes within the neuron leading to its death. Excitotoxicity is a cascading process of death of neurons following an original focus of damage and is a major contributor to limited recovery following initial brain injury. Excitotoxicity features in stroke, traumatic brain injury, epileptic seizure, spinal cord injury and likely contributes to neurodegenerative diseases of the central nervous system such as multiple sclerosis, Alzheimer’s Disease, Huntington’s Disease, Parkinson’s Disease and amyotrophic lateral sclerosis (ALS). While neurodegenerative diseases have many different causes, the nature of the damage in the brain can have a common basis in the excitotoxicity process.

About NYX-104

NYX-104 is a small molecule kinase-inhibitor that blocks TRPC class ion channel-regulated influx of calcium ions and mobilisation of calcium stores in axons exposed to glutamate overload.

About Noxopharm

Noxopharm is an Australian drug development company with offices in Sydney and Hong Kong. The Company has a primary focus on the development of drugs to address the problem of chemotherapy- and radiation-resistance in cancer cells, the major hurdle facing improved survival prospects for cancer patients. NOX66 is the first pipeline product, with later generation drug candidates under development. The Company also has initiated a pipeline of non-oncology drugs.

About Nyrada Inc.

Nyrada Inc is a recently formed, New York-based biotechnology company that proposes to commence business with 3 drug assets: NYX-104 (excitotoxicity inhibitor), NYX-205 (anti-inflammatory), NYX-330 (PCSK9 inhibitor).

Investor & Corporate Enquiries:

Prue Kelly

M: 0459 022 445

E: info@noxopharm.com

Company Secretary:

David Franks

T: +61 2 9299 9690

E: dfranks@fa.com.au

www.noxopharm.com

Forward Looking Statements

This announcement may contain forward-looking statements. You can identify these statements by the fact they use words such as "aim", "anticipate", "assume", "believe", "continue", "could", "estimate", "expect", "intend", "may", "plan", "predict", "project", "plan", "should", "target", "will" or "would" or the negative of such terms or other similar expressions. Forward-looking statements are based on estimates, projections and assumptions made by Noxopharm about circumstances and events that have not yet taken place. Although Noxopharm believes the forward-looking statements to be reasonable, they are not certain. Forward-looking statements involve known and unknown risks, uncertainties and other factors that are in some cases beyond the Company's control that could cause the actual results, performance or achievements to differ materially from those expressed or implied by the forward-looking statement. No representation, warranty or assurance (express or implied) is given or made by Noxopharm that the forward-looking statements contained in this announcement are accurate and undue reliance should not be placed upon such statements.