

Date: 22 October 2019

Sydney, Australia

ASX Limited 20 Bridge Street SYDNEY NSW 2000

Noxopharm and Nyrada Inc - TechKnow Invest Roadshow 2019 Presentations

Sydney, 22 October 2019: Noxopharm (ASX: NOX) provides to the market the Noxopharm and Nyrada Inc corporate presentations ahead of the TechKnow Invest Roadshow 2019 in Sydney (October 22, 2019) and Melbourne (October 24, 2019).

The Noxopharm presentation focuses on recently reported significant anti-cancer responses in the Company's DARRT program in prostate cancer, and the commercial opportunity on offer.

The Nyrada presentation focuses on the Company's cholesterol-lowering and neuroprotection drug programs.

The two presentations will be found at www.noxopharm.com

About Noxopharm

Noxopharm is a clinical-stage Australian drug development company with offices in Sydney and New York. The Company has a primary focus on the development of Veyonda[®] and is the major shareholder in Nyrada Inc, a spin-off company developing a pipeline of non-oncology drugs.

About Nyrada,Inc

Nyrada Inc is an early-stage drug development company based in Sydney. Currently, it is focused on three R&D programs in the areas of neuroprotection, hypercholesterolemia, and neuropathic pain. 66.7% of the total issued share capital of Nyrada currently is owned by Noxopharm Ltd; Altnia Holdings Pty Ltd owns 33.3%.

About TechKnow Invest Roadshow (2019)

The TechKnow Invest RoadShow provides the attending companies with the opportunity to present in two major investment cities, reach out to highly diverse investment audiences including institutional investors, brokers & private investors, and networking opportunities with investors & brokers.

www.noxopharm.com

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Dr Graham Kelly Founder and Executive Chairman



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Key investor message

Noxopharm is seeking to bring to market a drug that restores the ability of the body's immune system to fight and eliminate cancer

Veyonda[®] A novel and potentially transformative drug candidate in the fight against cancer





The problem

An unwelcome truth



1:2 men and 1:3 women will develop a life-threatening cancer

30% will die from that cancer within 5 years



After 45 years of 'the war on cancer'...... 10-year survival rates remain poor for many cancers



changes in survival , 1971-72 to 2010-11

Little or no progress made in survival outcome for cancers of: - Pancreas - Lung - Brain - Head and neck - Oesophagus - Stomach - Cervix - Bladder
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BUT....even where progress has been made, most cancers eventually recur and ultimately become resistant to chemotherapy and radiotherapy



CANCER represents avoidance of the body's immune system



Emergence of cancer cell



'Foreign' cell detected → immune cells activated



Emergence of cancer cell



Immune cells suppressed or rejected



Immune cells arrive and eliminate cancer cell



Tumour grows freely in absence of immune function





The Solution

Immuno-oncology therapy the transforming approach to cancer therapy

Aiming to restore the ability of the body's immune system to recognize and kill cancer cells



2018 global sales = US\$16 billion Projected to be > US\$100 billion if response rates can be improved Current response rates low for most cancers



Improving response rates to immuno-oncology drugs identified as needing to increase the immune activity inside tumours



Majority of tumours believed to be COLD





DARRT Treatment



A novel way of converting tumours from COLD to HOT













Single tumour exposed to low-dose radiotherapy

Radiation damages cancer cells → an inflammatory response Veyonda[®] boosts the immune response to the radiotherapy



Palliative Radiotherapy - seeking to improve quality of life in late-stage cancer

- Low-dose
- Designed to treat symptoms such as pain
- Maximum 2 tumours irradiated
- Not intended to stop disease progression





Shrinkage of Irradiated tumor





DARRT – Taking palliative radiotherapy and converting a modest immune response in a single irradiated tumour into a strong local immune response that spreads throughout the body

DIRECT response



Shrinkage of Irradiated tumor

Complete resolution of Irradiated tumor

ABSCOPAL response







DARRT-1 clinical study

Prostate cancer and treatment options









- > 25 men with late-stage prostate cancer
- Metastatic castrate-resistant prostate cancer (mCRPC)
- > No remaining standard treatment options
- Progressive disease
- Eligible for palliative radiotherapy for symptomatic relief















	<u>3-months</u>	<u>6-months</u>
No. patients	22*	11**
Mean starting PSA	623 ng/mL	(1-3 normal range)
PSA Response (>50% fall)	7 (33%)	2
Pain Response (>30% fall)	13 (60%)	6 (55%)
RECIST		
No.patients	22	10
Stable disease	13 (60%)	7 (70%)
Partial response	3 (17%)	1 (10%)
Progressive disease	2 (10%)	2 (20%)

* 25 men enrolled; 22 with evaluable disease

** Data from remaining 11 men to be reported in Nov 2019







CONCLUSIONS TO DATE

The DARRT treatment has stopped disease progression in almost 3 out of 4 (73%) men with late-stage prostate cancer over 6 months

High (55%) incidence of pain reduction over 6 months

Evidence of shrinkage in non-irradiated tumours

Combination treatment very well tolerated

- Data from last 11 men due late-Nov 2019
- Final Statistical Report due Feb 2020







MARKET OPPORTUNITY







DARRT Next steps

DARRT-2 Clinical Study

- To commence H2 2020
- Phase 2 adaptive
- Control-arm study (palliative therapy)
- Multiple sites, multi-national
- Medical advisory boards established
- Single course of radiotherapy/repeat cycles of Veyonda
- Overall survival, progression-free survival, tumour response, PSA response, pain response, QoL outcomes





- Summary



Current data showing DARRT delivering meaningful anticancer effects including pain relief over extended periods

Potentially transformative therapy for late-stage prostate cancer where no standard therapy exists currently

Large commercial opportunity with significant potential to be a major player in the projected US\$100 + billion immunooncology market

Potential ability to turn NOXOPHARM into a significant global biotech company





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Improving Lives, Offering Hope

James Bonnar Chief Executive Officer

TechKnow INVEST ROADSHOW October 2019



Vision and Portfolio



Vision

To become a high-growth pharmaceutical company, specialising in drug discovery and early-stage development in areas of substantial unmet clinical need, where few (if any) effective or well-tolerated therapies exist





Opportunity 2

A drug to minimise cell damage associated with brain injury

Market: patients with stroke or traumatic brain injury

Portfolio

Opportunity 1

A drug to lower cholesterol levels beyond what can be achieved with statins

Market: patients at risk of cardiovascular disease

The Cholesterol Problem



lssue

78 million

ADULTS IN THE US

have **high LDL cholesterol** in the range considered high risk for **heart disease** and **stroke**

600k (1 in 4)

DEATHS EACH YEAR in the US are attributed to **cardiovascular disease**

US\$317 billion

CARDIOVASCULAR DISEASE COSTS IN THE US Including healthcare services, medications and lost productivity

43 million

ADULTS IN THE US have high LDL cholesterol and are taking statins

Current Standard of Care





Statin drugs block the liver's ability to make LDL-cholesterol (Global sales of statin drugs in 2018 estimated to be **US\$19 billion**)

However...

- Many patients are statin intolerant (12-20%)
- Many patients do not achieve target 'healthy' cholesterol levels (10-20%) (Gorcyca, K., et al., - see slide 7 for more details)

Opportunity

Identified need to supplement statin therapy

PCSK9: Beyond Statin Therapy



Cholesterol and PCSK9

PCSK9, a protein found in blood, plays a key role in regulating LDL cholesterol levels

Statins reduce the production of LDL cholesterol To compensate, the liver produces more PCSK9 Statins increase PCSK9 blood levels: This accounts for their failure to work optimally for many patients

PCSK9 inhibitors: If the action of PCSK9 is blocked, statins work more effectively, with LDL-cholesterol levels falling an additional 50-60% Current PCSK9 inhibitors



Two monoclonal antibody PCSK9-inhibitors came to market in 2015

Very effective when used in combination with statins, however ...

- Must be injected every 2-4 weeks, for life
- High cost (US\$4.6-5.8k per year)

Our Cholesterol-Lowering Solution

What's Unique

As far as we are aware, Nyrada is only 1 of 2 companies developing a small molecule PCSK9-inhibitor. Our aim is that our drug will pave the way for a single pill solution, for effective lowering of high LDL cholesterol.

- ✓ Benefit of allowing a lower statin dose in statin-sensitive patients (Nyrada PCSK9 inhibitor + statin)
- ✓ Monotherapy treatment in patients unable to tolerate statins (Nyrada PCSK9 inhibitor alone)

Target Drug Profile

- Once-a-day oral tablet incorporating a generic statin
- Safety profile consistent with chronic administration
- Patentable
- Cost effective

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Cholesterol-Lowering Drug: Market Overview (US)



Patient and Market Need

Large potential market - There are approximately **18 million people** in the U.S. with atherosclerotic cardiovascular disease (ASCVD) who live with elevated LDL levels despite taking maximally tolerated lipid-modifying therapy — including individuals considered statin intolerant — leaving them at high risk for cardiovascular events.

Source: Gorcyca, K., et al., Prevalence of Atherosclerotic Cardiovascular Disease (ASCVD) and Diabetes Populations in the United States. Journal of Clinical Lipidology, 2015. 9(3): p. 424.

Overview of competitor PCSK9 therapies
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Drug Name	Status	Company	Target	Molecule	Delivery
Evolocumab (Repatha)	Marketed	Amgen	PCSK9 inhibitor	Monoclonal	Injectable
Alirocumab (Praluent)	Marketed	Sanofi/Regeneron	PCSK9 inhibitor	Monoclonal	Injectable
Bempedoic acid ± ezetimibe	Phase III	Esperion	ATP citrate lyase inhibitor	Small molecule + combination	Oral
Inclisiran	Phase III	The Medicines Company	PCSK9 siRNA	siRNA	Injectable
Evinacumab	Phase III	Regeneron	ANGPTL3 inhibitor	Monoclonal	Injectable
LY3015014	Phase II	Lilly	PCSK9 inhibitor	Monoclonal	Injectable
AFFITOPE (AT04A)	Phase I	AFFIRIS AG	PCSK9	Vaccine	Injectable
P-21	Preclinical	Shifa Biomedical	PCSK9 inhibitor	Small molecule	Oral
NYX-330	Preclinical	Nyrada Inc.	PCSK9 inhibitor	Small molecule	Oral

Brain Injury Problem



Stroke

0.8 million

PEOPLE EACH YEAR suffer a stroke in the US

140k (1 in 18)

DEATHS EACH YEAR in the US are attributed to stroke

STROKE COSTS Direct medical costs and indirect costs US\$34 billion yearly in the US

Traumatic Brain Injury

2.8 million

PEOPLE EACH YEAR sustain a TBI in the US

50k (1 in 52)

DEATHS EACH YEAR in the US are attributed to TBI

TBI COSTS Direct medical costs and indirect costs US\$60 billion

yearly in the US

Our Neuroprotection Solution

Current Therapy

Largely unmet clinical need

- Clot-buster drugs (e.g. Alteplase) for treatment of acute ischemic stroke (approx. 87% of all stroke)
- Therapeutics for traumatic brain injury limited to diuretics, anti-seizure, and coma-inducing drugs

Neuroprotectant Therapy

- In the days following brain injury, the area of damage expands, worsening patient outcomes
- Our drug aims to prevent this, limiting injury size and improving prognosis (stroke and TBI)



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Brain Injury Drug: Market Overview (US)



Stroke	
Number of acute stroke emergency room visits per year in the US	Approx. 656k
Patients who present within nominal 12-hour therapeutic window (>75%)	Approx. 490k

Alteplase (tPA) sales approx. US\$1.2 billion in 2017; average additional cost per patient US\$11k (Only suitable for approx. 5-15% of acute ischemic stroke patients due to contraindications and <4.5 hr therapeutic window)

Traumatic Brain Injury (Moderate to Severe)	
Number of hospital admissions for TBI during one year in the US	Approx. 282k
Patients who present within nominal 12-hour therapeutic window (>75%)	Approx. 210k

Total annual estimated US market size for brain injury combined: approx. 700k patients* (490k + 210k = 790k) (Excludes 2.58 million concussions, 21k US military TBIs and, in addition, the emerging CTE market)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5614785/

Morris DL et al. Prehospital and emergency delays after acute stroke: the Genentech Stroke Presentation Survey: Stroke 2000 Nov;31(11):2585-90 Taylor CA et al. Traumatic Brain Injury–Related Emergency Department Visits, Hospitalizations, and Deaths — United States, 2007 and 2013



A staged research and development program to deliver preclinical and clinical validation subject to standard drug development risks

- Proof-of-concept established for both the cholesterol-lowering and neuroprotection programs
- Lead optimisation well-advanced
 - Composition of matter patents have been lodged (but not yet granted) for both programs
 - Key publication submitted (PCSK9 inhibitor)
- First-in-human Phase I studies target time frames subject to all necessary regulatory approvals and preclinical results
 - Cholesterol-lowering program: late-2021
 - Neuroprotection program: mid-2022

Board of Directors



Nyrada operates under the direction of a board of international calibre, with track record in founding and realising the value of biotech companies

	Mr John Moore Non-Executive Chairman	John currently serves as Non-Executive Chairman of Trialogics, a clinical trial informatics business. John is a director of Scientific Industries (SCND-OTCQX), a producer of laboratory instruments for the life sciences industry. He is a graduate of Rutgers University.
	Dr Graham Kelly Executive Director	Graham is a scientist with 50 years' experience in drug development in both academic and biotechnology sectors. He is the Founder and Executive Chairman of Noxopharm Limited (ASX:NOX), a major shareholder of Nyrada. He holds a PhD as well as degrees in Science and Veterinary Science from The University of Sydney.
S	Mr Peter Marks Non-Executive Director	Peter is currently a Director of Alterity Therapeutics Limited (ASX:ATH and NASDAQ:ATHE), Non-Executive Director of Noxopharm Limited (ASX: NOX) and Non-Executive Director of Fluence Corporation Ltd (ASX: FLC). Peter holds an MBA from the University of Edinburgh, Scotland, a Bachelor of Economics, Bachelor of Laws and a Graduate Diploma in Commercial Law from Monash University, Australia.
6	Mr Marcus Frampton Non-Executive Director	Marcus is CIO of Alaska Permanent Fund Corporation (APFC), a \$65 billion sovereign wealth fund for Alaska. He is also a shareholder/Director of Scientific Industries, Inc, a leading manufacturer of laboratory equipment and owner of IP relating to bioprocessing systems. Marcus graduated from UCLA with a degree in Business-Economics and a Minor in Accounting.
20	Dr Rüdiger Weseloh Non-Executive Director	Rüdiger joined Merck KGaA, Darmstadt, Germany, as Senior Licensing Manager in 2006 holding positions in BD and is now a Senior Director. He has a university diploma in biochemistry from the University of Hannover and a PhD in molecular neurobiology, obtained at the Center for Molecular Neurobiologyin Hamburg.

Scientific Advisory Board



Nyrada benefits from an international team of experts with deep experience in drug development to advise its board and management

E	Prof Gary Housley MSc, PhD	Scientia Professor Housley holds the Chair of Physiology and is director of the Translational Neuroscience Facility,School of Medical Sciences at the Universityof New South Wales, Sydney, Australia
69	Prof Junichi Nabekura PhD	Junichi Nabekura is Professor of Physiology and Neuroscience, and Director of the National Institute of Physiological Sciences (NIPS) in Okazaki, Japan
	Prof David Burke MD, DSC	David is Professor of Neurology at Royal Prince Alfred Hospital, University of Sydney
	Prof Gilles Lambert PhD	Gilles Lambert is Professor of Cell Biology at The University of La Réunion Medical School (France) and group leader, Inserm Laboratory of Diabetes & Atherothrombosis of the University Hospital of La Réunion
27	Jim Palmer PhD	Jim brings over 30 years of experience in drug discovery programs targeting oncology, cardiovascular, inflammation, joint and bone disease, and infectious diseases. Jim currently operates his own consulting business (Pharma Discovery)



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