NOVOGEN

THE FUTURE OF CANCER THERAPY

ASX:NRT

NASDAQ:NVGN

Novogen Ltd (Company)

ABN 37 063 259 754

Capital Structure

Ordinary Shares on issue:

246 M

Board of Directors

Dr Graham Kelly
Chairman & Executive Director

Steve Coffey
Non Executive Director

John O'Connor
Non Executive Director

Prof Peter Gunning
Non Executive Director

ASX RELEASE
16 January 2015

NOVOGEN ANNOUNCES IMPORTANT DISCOVERY IN REGENERATIVE MEDICINE PROGRAM

Novogen Limited (ASX:*NRT*; NASDAQ:*NVGN*), an Australian/US biotechnology company, today announced an important discovery in its regenerative medicine program that has delivered a key proof-of-concept step forward in the quest to develop drugs capable of stimulating the function of brain tissue stem cells.

Regenerative medicine is concerned with repairing or replacing tissue lost due to age, disease, damage or congenital defects. In the case of the brain, damage associated with stroke, head trauma or neurodegenerative disease represents a very significant unmet clinical need for such therapies.

Novogen scientists now in an important scientific breakthrough have identified a family of compounds with an ability to promote the growth and activity of normal brain stem cells.

The dominant approach being taken to brain regeneration is the introduction of tissue stem cells that have been cultured outside of the body. However, delivery of these cells through the skull is very invasive and, so far, these cells seem to be susceptible to the same constraints that limit the resident stem cell population.

Work in the 1990's showed that the old adage, 'We continue to grow brain cells until age 21, and from then on it's all downhill', was, in fact, untrue. Close examination revealed that part of the hippocampus, the main site of learning and memory within the brain, is constantly renewed throughout life by a pool of dividing stem cells. A second discrete pool of stem cells generates daughter cells that can migrate to sites of brain damage to facilitate repair. Unfortunately, for reasons that are not currently understood, these migrating stem cells fail to produce enough new neurons in the damage site to provide substantial recovery.

Novogen adopted the alternative approach of seeking drugs that would promote the migration of stem cells to the site of injury, seek to retain those stem cells at the damaged site, and then promote their regenerative capacities. This offered the potential of a non-invasive, well-tolerated, medicinal approach to a widespread problem.

In April 2014, Novogen established a partnership with Genea Biocells, an Australian company with world-leading expertise in the production, growth and development of human embryonic stem cells. The original purpose of that collaboration was to mine the Company's super-benzopyran drug technology platform for new therapies with the capacity to repair aberrant stem cells in people with various neurodegenerative disorders (eg. motor neurone disease) and musculodegenerative disorders (eg. muscular dystrophies).

That program recently was extended to look at the ability of that same drug platform to stimulate the growth of healthy brain stem cells to create new nerve cells. That has been achieved in what is the first key step in the path to the development of a new family of drugs to treat brain injury.

With the central pharmacophore now identified as displaying this activity, a medicinal chemistry program now is underway to produce a lead candidate compound that will be taken into an animal model that replicates human brain injury.

David Brown PhD, Novogen Group CSO, said, “Some years ago, we saw evidence with one of our early drugs of an ability to promote the function of nerve cells, even to the extent of protecting nerve cells from damage by cytotoxic drugs. But it is only now with the advent of our super-benzopyran drug platform that we are seeing a more profound effect to the extent of promoting the activity of the all-important brain stem cells. Now we have the basis of a drug development program.”

Graham Kelly PhD, Novogen Group CEO and Executive Chairman, said, ”The development of anti-cancer drugs remains our overriding focus. But what this discovery announced today does is to demonstrate the enormous potential of our intellectual property across many areas of medicine as the basis for Novogen working to become a global drug discovery company across broad therapeutic fields.”

About Novogen Limited

Novogen is a public, Australian drug-development company whose shares trade on both the Australian Securities Exchange (‘NRT’) and NASDAQ (‘NVGN’). The Novogen group includes US-based, CanTx Inc, a joint venture company with Yale University.

Novogen has two main drug technology platforms: super-benzopyrans (SBPs) and anti-tropomyosins (ATMs). SBP compounds have been designed to kill the full heterogeneity of cells within a tumor, including the cancer stem cells. The molecular target is a trans-membrane electron-transfer pump mechanism oncogene that is common to all cancer cells. Cells die by respiratory distress and mitochondrial disintegration.

The ATM compounds target the micro-filament component of the cancer cell’s cytoskeleton and have been designed to combine with anti-microtubular drugs (taxanes, vinca alkaloids) to produce comprehensive and fatal destruction of the cancer cell cytoskeleton.

The Company pipeline comprises three SBP drug candidates (TRXE-002, TRXE-009, TRXE-0025) and one ATM drug candidate (‘Anisina’).

Further information is available on our websites www.novogen.com

For more information please contact:

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