NOVOGEN LIMITED ASX:NRT



ASX RELEASE 14 November 2013

# Novogen Announces Important Discovery in Program to Develop Drugs Against Genetic and Degenerative Disorders

Novogen compounds currently undergoing screening against 30 genetic disorders including Cystic Fibrosis and Huntington's Disease

Novogen Limited (ASX:NRT, NASDAQ: NVGN) is engaged in a pilot program aimed at the breakthrough development of drugs to treat a wide range of genetic and non-genetic degenerative diseases including muscular dystrophy, motor neurone disease, Huntington's Disease, cystic fibrosis and Alzheimer's Disease.

The program has returned positive findings, with a pilot drug proving to be highly cytotoxic against the initial screen: stem cells from a neuromuscular dystrophy disease.

The program is being conducted in collaboration with Australian company, Genea Biocells, which has pioneered the isolation and in vitro differentiation of stem cells from embryos with genetic disorders and now holds the world's largest bank of pluripotent human embryonic stem cells with over 100 lines covering some 30 different diseases.

The program is based on the discovery that one of the Novogen drug families induces apoptosis in cancer stem cells in a highly potent manner, with the company to date focusing that biological property on the development of anti-cancer drugs.

Novogen CEO, Dr Graham Kelly, said that the success of the cancer program led Novogen scientists to speculate that the same compounds might be equally effective against abnormally-behaving stem cells associated with common degenerative diseases.

"The more we work with cancer stem cells, the more we have come to suspect that the action of our drugs is not so much the fact that the stem cells are cancerous, but that they are behaving abnormally. It was this suspicion that led us to this pilot study looking at their effect on abnormal stem cells responsible for causing degenerative diseases."

"This early data completely supports our hypothesis. This is an exciting discovery for the Company and one that considerably expands its commercial scope. Our immediate focus will always be on the development of anti-cancer drugs, but this discovery cannot be ignored given the life-disrupting seriousness of many genetic and degenerative disorders."

"As a result of this discovery, we now are committing the necessary resources to take this program to its next phase, which is to design and screen drugs against a wide range of stem cells associated with diseases such as cystic fibrosis, muscular dystrophy, Fragile X, Huntington's Disease and Alzheimer's Disease," he added.

Dr Kelly said destroying the aberrant stem cells was an important first step toward eventually being able to successfully treat these kinds of conditions.

Dr Uli Schmidt, General Manager of Genea Biocells said, "We made the effort to establish our stem cell technologies for this very reason - to use it as a resource to screen drugs in the hope of developing therapies for genetic disorders,"

"Being able to selectively modulate disease-affected stem and progenitor cells is a highly interesting observation that will help us better understand and potentially design treatments for such disorders" Schmidt added.

## About Novogen

Novogen Ltd is a public Australian biotechnology company whose shares trade on both the Australian Stock Exchange (symbol 'NRT') and NASDAQ (symbol 'NVGN'). The Company is based in Sydney, Australia and is focused on the development of novel anti-cancer drugs based on two proprietary drug technologies - the super-benzopyran chemical family and anti-tropomyosin drug technology.

## About Genea Biocells

Genea Biocells Pty Ltd develops unique human stem cell tools to advance research and drug discovery in areas of unmet medical need. Genea Biocells partners with industry for custom-developed cell-based assay solutions in drug development and supplies application-ready, disease-affected and control differentiated cell types, including neurons and skeletal muscle. Genea Biocells is a subsidiary of fertility group Genea, a public, unlisted company that has been operating IVF clinics in Australia since 1985..



## About Pluripotent stem cells

Human pluripotent stem cells can be expanded indefinitely in the laboratory and have the potential to differentiate to all cell types found in the human body. When derived from patients or embryos carrying genetic diseases they present an invaluable resource to study mechanisms causing disease and to test pharmacological properties of drug candidates.

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