

Novogen progresses on drugs against genetic, degenerative disorders

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Singapore: Australian company Novogen, engaged in a pilot program aimed at breakthrough development of drugs to treat a wide range of genetic and non-genetic degenerative diseases, has met positive findings with a pilot drug proving to be highly cytotoxic.

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.

Dr Graham Kelly, CEO, Novogen, 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.

"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," Said Dr. Kelly.

"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.