



ASX RELEASE

7 November 2013

Novogen Announces Joint Venture Dedicated to Fighting Ovarian Cancer

7 November 2013. Novogen Limited, an Australian biotechnology company listed on both the Australian Securities Exchange (*NRT*) and NASDAQ (*NVGN*), and Yale University, today announce the establishment of a new joint venture dedicated to the development of chemotherapy strategies to fight ovarian cancer.

The joint venture company is CanTx, Inc and is based in New Haven, Connecticut. Novogen owns 85% of the new company.

The joint venture brings together two fundamental complementary resources required to combat ovarian cancer. In the case of Novogen it is a drug technology platform capable for the first time of killing the full range of cells within an ovarian cancer at clinically meaningful doses, but most importantly, ovarian cancer stem cells.

In the case of Yale, it is the *in vitro* and *in vivo* test systems capable of evaluating the clinical potential of those drugs. The involvement of Yale also ensures access to world-class clinical facilities and will expedite the move from the bench into the clinic.

CanTx R&D will be centered at the laboratories of Professor Gil Mor of Yale Medical School. Professor Mor is the first researcher in the world to isolate ovarian cancer stem cells: those cells responsible for ovarian tumor growth initially and then tumor recurrence following chemotherapy.

Under this joint venture arrangement, Novogen retains full ownership of its drug technology intellectual property (IP) and will grant CanTx access to that IP for drug development purposes only. Novogen separately will continue to exploit the same IP for a range of other clinical indications including glioblastoma, along with its newly-acquired anti-tropomyosin drug technology.

Professor Mor said, "This is the future of cancer drug development with academia and industry working together for the benefit of the patient. There have been no new therapies for ovarian cancer for the past 30 years and a fresh approach is urgently needed."

"Current chemotherapy unfortunately only does half the job. It is reasonably effective at killing the predominant somatic cancer cells, but by not killing the cancer stem cells.

Around 70% of patients who respond to first round chemotherapy will eventually experience tumor recurrence.”

“Our experience with the Novogen super-benzopyran family of drugs leads us to believe that this is the future. These drugs show a high degree of activity against ovarian cancer stem cells where no other drug in our experience has worked. This program will be the first in the world dedicated to finding an effective treatment for ovarian cancer, with the advantage that promising treatments are capable of being moved quickly into clinical studies in months instead of years.”

Dr Graham Kelly, Novogen CEO, said, “This joint venture with Yale brings a level of expertise, resources and firepower that is unique in the field of ovarian cancer.”

This is a full onslaught against this insidious disease that will occur on two fronts. The first front is immediate and is based on our lead drug candidate, Trilexium. A variant of Trilexium has been identified as a powerful killer of ovarian cancer stem cells and is being packed into a delivery system specially designed by Professor Mor’s laboratory that is to be given intra-peritoneally (the abdominal cavity) where it seeks out ovarian cancer cells.”

“When anti-cancer drugs are injected intravenously, usually only 3% or so of the drug actually reaches the tumor. With this delivery system, virtually all injected drug reaches the tumor, thereby ensuring maximum anti-cancer effect.”

“The second front is more long-term but very exciting and that is to personalize chemotherapy on an individual patient basis. This is the same approach that we are taking with all the clinical indications we are pursuing with our super-benzopyran drug platform. As we make small structural changes to these drugs, we find that they change their target. Each super-benzopyran drug is highly efficient at killing cancer stem cells from the one individual, but no single drug is able to kill cancer stem cells across all individuals. This leads us to conclude that we have identified for the first time a family of drugs capable of identifying different mutations within a cancer.”

“The task now is to create a panel of these drugs capable of killing cancer stem cells across a wide range of patients so that the appropriate drugs can be matched to the individual tumor. CanTx will take this strategy into ovarian cancer while Novogen will focus on a range of other clinical indications,” Kelly added.

Kelly said, “We have an extraordinary wealth of opportunities at our disposal. With the super-benzopyran drug technology we are actively pursuing ovarian cancer and glioblastoma as primary indications, each with the dual strategy of developing an immediate drug for clinical use followed by the development of a panel of drugs for personalized chemotherapy. On top of that we have our newly acquired anti-tropomyosin drug technology with its applications across the fields of melanoma, prostate cancer and neuroblastoma. In the face of this broad range of opportunity, linking up with a partner such as Yale with its considerable clinical resources and know-how, brings a greater level of certainty to the success of just one of those programs.”

About Ovarian Cancer

The American Cancer Society estimates that over 22,000 women will be diagnosed with ovarian cancer during 2013 and 14,230 American women will die from the disease. It ranks fifth in cancer deaths among women, accounting for more deaths than any other cancer of the female reproductive system.

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 Trilexium

Trilexium belongs to a new class of drug candidates known (structurally) as super-benzopyrans. Members of this family of drugs are showing high potency against both cancer stem cells and somatic cancer cells recovered from both ovarian cancers and glioblastoma cancers. Using the Trilexium structure as a pharmacophore, variants of the molecular scaffold (analogs) are being created and tested against ovarian and glioblastoma cancer stem cells.

About Cancer Stem Cells

Cancer stem cells are thought to be the tumor-initiating cells in many cancers responsible for both the production of the tumor mass and metastasis. Cancer stem cells have been confirmed in both ovarian cancers and glioblastoma. These cells are highly resistant to chemotherapy and radiotherapy, a property thought responsible for tumor recurrence following successful initial therapy.

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