NOVOGEN
THE FUTURE OF
CANCER THERAPY

ASX Code: NRT
Novogen Ltd

ABN 37 063 259 754

Contact Details

PO Box 2333

Hornsby Westfield NSW 2077

T +61 2 9472 4100

F +61 2 9457 0388

E Graham.Kelly@Novogen.com

Capital Structure

Ordinary Shares on issue:

168 M

Board of Directors

Dr Graham Kelly
Chairman & Executive Director

Steve Coffey
Non Executive Director

John O'Connor
Non Executive Director

Ian Ross
Non Executive Director

Prof Peter Gunning
Non Executive Director

ASX RELEASE

6 November 2014

CANTRIXIL PROVES HIGHLY EFFECTIVE IN PRE-CLINICAL TEST OF REFRACTORY OVARIAN CANCER

Novogen Limited (ASX:NRT) and its joint venture company, CanTx Inc., with Yale University, has received confirmation that its experimental drug product, Cantrixil, has passed its final pre-clinical test of efficacy as evidence of its potential to significantly improve the survival prospects of patients with late-stage ovarian cancer.

Cantrixil is a construct of the cytotoxic anti-cancer drug candidate, TRX-E-002-1, in a cyclodextrin (sugar) ball. Cantrixil has been designed specifically to be injected into body cavities (peritoneal cavity, pleural cavity) to seek out and destroy cancer stem cells, the cells primarily responsible for the initiation of cancer, its spread, and its continued growth in the face of chemotherapy.

Cantrixil is being developed as a first-line, second-line and salvage therapy for ovarian cancer, and for the treatment of the late-stage conditions, malignant ascites and malignant pleural effusion.

The initial Phase 1 study is to be conducted in women with late-stage ovarian cancer that has become unresponsive to standard therapy. Cantrixil has already successfully passed an animal model of first-line therapy in ovarian cancer. A follow-up study then was conducted as a final challenge to test the product's efficacy in an animal model of refractory ovarian cancer.

That final test is an animal model developed in conjunction with CanTx that mimics the clinical situation seen in women whose ovarian cancer has become resistant to all forms of chemotherapy. To date, no drug, standard or experimental, has been shown to produce any lasting or meaningful inhibition of the growth of the cancer in this model.

The animal model involves the injection of human ovarian cancer stem cells into the peritoneal cavity of mice where they attach to and grow on the various abdominal organs, just as they do in women. The tumors display the same appearance and range of cell types as found in their human counterparts. The mice then are treated with paclitaxel, the standard first-line chemotherapy used in ovarian cancer. The paclitaxel produces a temporary anti-cancer effect, followed by rapid tumor growth despite ongoing paclitaxel treatment. This rapid tumor growth of chemo-resistant cancer again mimics what happens in late-stage ovarian cancer in women.

Novogen CEO, Dr Graham Kelly, said today, “When Cantrixil was injected into the peritoneal cavity of the mice with these paclitaxel-resistant cancers, tumor development in the great majority of mice was completely eradicated. In fact, microscopic examination of the abdominal tissues could detect no evidence of micro-metastases of cancer stem cells, suggesting that Cantrixil had been effective in wiping out the cancer via its ability to kill the cancer stem cells.”

“The great majority of experimental drugs fail in the clinic after showing encouraging anti-cancer activity in animals. One of the main reasons for this is that the animal model is completely unrepresentative of the human situation. CanTx has gone to extraordinary lengths to produce an animal model that is as close to the human situation as it is possible to get, certainly a far more stringent test than has ever been used for any other drug targeting ovarian cancer. The fact that Cantrixil has produced such a dramatic and durable anti-cancer effect in this model gives us every confidence that we can deliver a comparable effect in the clinic,” Kelly added.

“I consider this a major step forward for both Novogen and for patients with ovarian cancer. And to people who would point out that this effect is still only pre-clinical, I would respond that to the best of my knowledge, this effect is beyond anything that any other drug has achieved, whether it is in the clinic or not. That is why we and the university team who generated it find the data exciting,” Kelly added.

About CanTx

CanTx Inc. is a private biotechnology company based in New Haven, Connecticut, and established as a joint venture between Novogen and Yale University. CanTx is dedicated to the development of anti-cancer drugs for the treatment of ovarian cancer.

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 a New Haven CT – based joint venture company, CanTx Inc., with Yale University.

Novogen has two main drug technology platforms: super-benzopyrans (SBPs) and anti-tropomyosins (ATMs). SBP compounds have been created to kill the full range of cells within a tumor, but particularly the cancer stem cells. The ATM compounds target the microfilament component of the cancer cell and when used in conjunction with standard anti-microtubular drugs, result in comprehensive and fatal destruction of the cancer cell’s cytoskeleton. Ovarian cancer, colorectal cancer, malignant ascites, prostate cancer, neural cancers (glioblastoma, neuroblastoma in children) and melanoma are the key clinical indications being pursued, with the ultimate objective of employing both technologies as a unified approach to first-line therapy.

Further information is available on our websites www.novogen.com and www.can-tx.com

For more information please contact:

Investor Contact
Dr. Graham Kelly
Executive Chairman & CEO Novogen Group
Graham.Kelly@novogen.com
+61 (0) 2 9472 4100

Media Enquiries
Cristyn Humphreys
Operations Manager Novogen Group
Cristyn.Humphreys@novogen.com
+61 (0) 2 9472 4111