

# ASX:NRT NASDAQ:NVGN

Novogen Ltd (Company)

ABN 37 063 259 754

#### **Capital Structure**

Ordinary Shares on issue:

363 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 28 May 2015

## ATM TECHNOLOGY EXTENDED WITH NEW PATENT LODGEMENT

**New York, USA – (May 28, 2015)** – US-Australian drug discovery and development company, Novogen Limited (ASX:NRT; NASDAQ:NVGN), announced today the lodgement with the US Patent Office of a key patent covering a novel family of compounds within the Company's anti-tropomyosin (ATM) drug technology platform.

These structurally novel compounds are related to the original ATM compounds, including lead drug candidate, Anisina. The lodgement of this new patent is part of the Company's ongoing strategy of seeking a dominant, if not exclusive position, in what it believes to be an entirely new and exciting field of drug discovery.

Andrew Heaton PhD, Novogen Group Vice-President of Drug Discovery and Manufacture, said, "The application of our VAL-ID (Versatile Approach to Library based Iterative Design) strategy has now been successfully executed on the ATM technology platform. This process has allowed us to extend the chemistry around our original ATM hit compounds, generating an entirely new family of compounds designed to target the tropomyosin protein. The new family of ATM's filed in today's patent not only extends potential patent coverage around the ATM technology platform, but also allows us to start the design and discovery process for the next generation of ATM lead candidates. We are already starting to see exciting initial *in vitro* data for this new family of compounds."

The ATM technology platform is concerned with drugs that disassemble the microfilament component of a cell's cytoskeleton. The microfilaments and microtubules are the two major structural components of the cytoskeleton, acting variously in concert and separately. The cytoskeleton plays a critical supporting role across most biological functions of a cell including the means of both internal and external communication, cell surface receptor function, cell division and cell movement.

Microfilaments have been regarded for many years as a potentially important new drug target, but drug development has stalled because of the ubiquity of the tropomyosin and actin protein components of the microfilament and the inability to selectively target the microfilaments in aberrant cells. Early drug candidates proved to be lethally toxic.

Novogen, in partnership with the University of New South Wales (UNSW), Sydney, Australia, has overcome the toxicity issue by developing molecules that are directed against selective isoforms of tropomyosin.

Graham Kelly, Novogen Group CEO, said, "Anisina is the proof of concept of this technology's enormous potential. It came from the discovery at UNSW that one tropomyosin isoform, Tpm3.1, has been commandeered by cancer cells for their survival. Anisina was designed specifically to block the action of Tpm3.1. The result is a strong anticancer activity with reduced toxicity. Most exciting, however, is the recent discovery that Anisina synergises with drugs which target the microtubules, the target of the most widely used drugs in chemotherapy: the taxanes and the vinca alkaloids. This combined attack on two major components of the cell cytoskeleton, microfilaments and microtubules, produces an anti-cancer effect some 20-times greater than either drug alone. We believe that this synergy has the potential to be a transformative step in the treatment of most forms of cancer."

"Lodging this patent is part of a major R&D commitment by this Company to this technology platform. In the first instance, we need to put as much exclusivity as possible around this opportunity by protecting this critical asset. Lodging a patent isn't usually a major event, as compared to receiving final grant of patent, except that Novogen believes that its ATM technology has the potential to herald an entirely new family of therapeutics, which means that every step the Company takes to secure protection of that major opportunity marks a significant step forward for the Company's future," Kelly added.

### **About Tropomyosins**

The proteins, tropomyosin and actin, combine to form many of the microfilaments of a cell. Actin is the dominant protein, providing a central core that gives the microfilament its strength and contractility. Tropomyosins run along either side of the actin and dictate the functional characteristics of the filament.

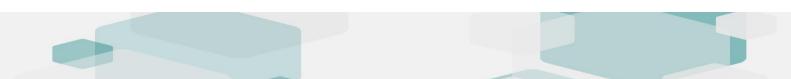
### **About Anisina**

Anisina binds to and inhibits the function of a core component of the microfilaments, tropomyosin Tpm3.1 (previously known as Tm5NM1). The role of Tpm 3.1 is to protect and stabilise the microfilaments of a cell. Binding of this protein by Anisina leads to the disassembly and collapse of the microfilaments resulting in cell death. Despite Tpm3.1 being found in both normal and cancer cells, Anisina preferentially targets cancer cells as these cells rely more heavily on a functional Tpm3.1 for survival.

### **About Novogen**

Novogen is a public, Australian-US 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 drug technology platforms yielding drug candidates that are first-in-class with potential application across a broad range of degenerative diseases. In the oncology field, the ultimate objective is to see both drug technologies used in combination as first-line therapy across most forms of cancer, with the objective of preventing tumor recurrence. This objective is based on a strategy of achieving comprehensive destruction of the full hierarchy of cells within a tumor with the super-benzopyran technology platform killing the tumor-initiating cells and the anti-tropomyosin technology combining with vinca alkaloids to deliver a potent chemical debulking effect on their daughter cells.

For more information, please visit <u>www.novogen.com</u>



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#### Forward Looking Statement

This press release contains "forward-looking statements" within the meaning of section 27A of the Securities Act of 1933 and section 21E of the Securities Exchange Act of 1934. The Company has tried to identify such forward-looking statements by use of such words as "expects," "appear," "intends," "hopes," "anticipates," "believes," "could," "should," "would," "may," "target," "evidences" and "estimates," and other similar expressions, but these words are not the exclusive means of identifying such statements. Such statements include, but are not limited to any statements relating to the Company's drug development program, including, but not limited to the initiation, progress and outcomes of clinical trials of the Company's drug development program, including, but not limited to, Anisina, and any other statements that are not historical facts. Such statements involve risks and uncertainties, including, but not limited to, those risks and uncertainties relating to the difficulties or delays in financing, development, testing, regulatory approval, production and marketing of the Company's drug components, including, but not limited to Anisina, the ability of the Company to procure additional future sources of financing, unexpected adverse side effects or inadequate therapeutic efficacy of the Company's drug compounds, including, but not limited to, Anisina, that could slow or prevent products coming to market, the uncertainty of patent protection for the Company's intellectual property or trade secrets, including, but not limited to, the intellectual property relating to Anisina, and other risks detailed from time to time in the filings the Company makes with Securities and Exchange Commission including its annual reports on Form 20-F and its reports on Form 6-K. Such statements are based on management's current expectations, but actual results may differ materially due to various factions including those risks and uncertainties mentioned or referred to in this press release. Accordingly, you should not rely on those forward-looking statements as a prediction of actual future results.