



**GARVAN  
INSTITUTE**

*Breakthrough Medical Research*

Embargoed until 5 PM February 8, 2006 (AEST)

## **Sydney scientists discover & license breakthrough anti-inflammatory treatment**

Scientists from the Garvan Institute of Medical Research have developed what could be the next big blockbuster treatment for inflammatory diseases such as rheumatoid arthritis and asthma.

This discovery is being commercialised by G2 Therapies Ltd, a biotechnology company founded by Garvan, which today announced the signing of an AU\$135 million research, development and licensing agreement with Danish healthcare company, Novo Nordisk. The terms of the agreement include an upfront payment and other success-based payments to a potential total of around US\$100 million (A\$135 million), plus royalties on commercialised therapeutics. The partnership will enable the new therapy to be taken through to human clinical trials.

Professor Charles Mackay, Head of Garvan's Arthritis & Inflammation Program and founder of G2 Therapies, says: "We have done what many others have been trying to do for years. We have made a therapeutic antibody against one of the most potent inflammatory agents in the body and used it to cure arthritis in mice. The next step is to translate the highly effective outcome we see in mice to human patients. If we can do this, we will have a revolutionary new treatment for a number of important human diseases".

The body needs a certain amount of inflammation to protect itself against disease. The hallmarks of inflammation reflect the major events: swelling of localised blood capillaries, and the movement of fluid and immune cells into damaged tissue in an effort to contain infection.

When immune cells become overactive, as is the case with rheumatoid arthritis, too many of them move into damaged tissue and exacerbate the condition. The new antibody blocks the action of one of the most important molecules for guiding inflammatory cells into tissue.

"We anticipate that our antibody will be a significant improvement over current therapies because it acts at a different and earlier point in the inflammatory process compared with current anti-inflammatory therapies," says Mackay.

Rheumatoid arthritis (RA) alone affects more than 21 million people worldwide and causes swelling of major joints, severe pain, and fatigue. In addition to treating RA, Professor Mackay believes their therapeutic could also be used for psoriasis, sepsis, heart attack and transplant patients.

Professor John Shine FAA AO, Executive Director of the Garvan Institute says: "It is important to work with companies if we are to turn scientific discoveries into real patient

benefits. The Garvan's commitment to taking our research from bench to bedside is evidenced by our investment in companies such as G2 and encouraging our senior scientists to participate in the commercialisation of research".

The Novo Nordisk licensing agreement has a potential value of over US\$100 million (A\$135 million), making it one of the largest licensing agreements ever secured by an Australian biotechnology company. Going forward, the Garvan Institute and G2 will remain involved in the crucial stages of development, making the deal one of the few true partnerships between academia and industry.

Commenting on the deal, Mr Bill Ferris AO, Chairman of the Garvan Institute's Board, says: "This is an exciting example of what is possible when you back early stage research with venture capital and encourage discoveries to develop in-house. Facilitating venture capital investment in medical research will ensure that all Australians will benefit from home-grown medical advances like the new anti-inflammatory treatment that has been developed at the Garvan."

-ENDS-

## **NOTES FOR EDITORS:**

Garvan's Arthritis and Inflammation program is supported by the National Health and Medical Research Council (NHMRC).

G2's development and commercialisation activities were supported by two Commonwealth programmes administered by AusIndustry: Biotechnology Innovation Fund (BIF) and R&D Start (now collectively replaced by the Commercial Ready programme), as well as grants from NSW Department of State and Regional Development (Proof of Concept and Non-Research Establishment Cost grants).

The Garvan Institute of Medical Research has a long-standing relationship with Novo Nordisk, principally in diabetes research.

### **About Garvan**

The Garvan Institute of Medical Research was founded in 1963 by the Sisters of Charity. Initially a small research department of St Vincent's Hospital in Sydney, it is now one of Australia's largest medical research institutions with over three hundred scientists, students and support staff. The Garvan Institute's main research programs are: Arthritis & Immunology, Osteoporosis, Cancer, Diabetes & Obesity, and Neuroscience. [www.garvan.org.au](http://www.garvan.org.au).

### **About G2 Therapies**

G2 Therapies is a biotechnology company founded in 2002 based on research undertaken by two scientists from the Garvan Institute of Medical Research, Professor Charles Mackay and Professor Rob Sutherland, with the aim of developing and commercialising antibody based therapeutics in inflammation and cancer. G2 is based at the Garvan Institute in Sydney, Australia, and conducts its research through two operating subsidiaries, G2 Inflammation P/L and G2 Cancer P/L. G2 Therapies is a private company chaired by Dr John Schubert, and its major investors include AMWIN, Baron Nominees, and the Garvan Institute of Medical Research. For further information, visit [www.g2therapies.com.au](http://www.g2therapies.com.au).

### **About Novo Nordisk**

Novo Nordisk is a healthcare company and a world leader in diabetes care and biopharmaceuticals. Novo Nordisk manufactures and markets pharmaceutical products and services that make a significant difference to patients, the medical profession and society. With headquarters in Denmark, Novo Nordisk has more than 22,000 full-time employees in 79 countries, and markets its products in 179 countries. Novo Nordisk's B shares are listed on the stock exchanges in Copenhagen and London. Its ADRs are listed on the New York Stock Exchange under the symbol 'NVO'. Novo Nordisk sales for 2005 were over A\$7.3 billion.

For more information, visit [novonordisk.com](http://novonordisk.com).