



Noxopharm Collaboration with Hudson Institute Secures Grant from mRNA Victoria Acceleration Fund

Highlights

- **Noxopharm collaborator Hudson Institute of Medical Research receives A\$100K grant from the mRNA Victoria Research Acceleration Fund**
- **Noxopharm to match funding and gain any potential drug candidates for its drug development program under terms of Hudson Institute agreement**
- **Novel strategy targets autoimmune disease, common disorders with few effective treatments, that impact quality of life and life expectancy**

Sydney 14 June 2022: Innovative Australian biotech **Noxopharm Limited (ASX:NOX)** is pleased to announce the Victorian Minister for Innovation, Medical Research and the Digital Economy, the Hon Jaala Pulford MP, has granted A\$100,000 from the mRNA Victoria Research Acceleration Fund to **Hudson Institute of Medical Research** for a study into RNA-based therapeutics.

Noxopharm's wholly owned subsidiary, Victoria-registered Pharmorage Pty Ltd, is collaborating with Hudson Institute and the Australian National University on this project to explore TLR7-driven autoimmune disease. Noxopharm will be matching the funding of this grant, making an investment of A\$100,000 with a view to progressing promising drug candidates into the Noxopharm drug development program, under the terms of its license agreement with Hudson Institute.

Autoimmune and auto-inflammatory disorders affect as many as 5% of Australians, with uncontrolled inflammation contributing to many chronic health issues. The focus of the research funded by this grant is lupus, an autoimmune disease that causes a range of debilitating conditions, severely impacting quality-of-life and life expectancy.

Hudson Institute has developed a novel strategy that utilises short RNA-like molecules (known as oligonucleotides) to block TLR7 receptors. These receptors are overactivated in SLE. The short oligonucleotides have the ability to block TLR7 activation and subsequent inflammation *in vitro*. This grant will fund the laboratory work to establish the therapeutic efficacy of these novel oligonucleotide TLR7 inhibitors in several animal models as well as in primary human cells derived from SLE patients.

If this technology is proven, Noxopharm will investigate the development of further oligonucleotide drug candidates with potential indications in other autoimmune diseases.

The project will commence shortly and will run for 12 months. Noxopharm will keep the market informed as the project progresses.

-ENDS-

About Autoimmune Disease

Inflammation is an essential process in the body to recruit immune system cells to combat infection or tissue damage. It is normally a fine-tuned process that is switched off when no longer required. However, if it persists, it can cause damage to a number of organs and even death in severe cases.

Uncontrolled, inflammation can lead to chronic immune activation, leading to pathologies referred to as autoimmune or auto-inflammatory diseases. There are over 100 autoimmune diseases, among them SLE, rheumatoid arthritis and type 1 diabetes. There is no cure for autoimmune diseases to date. Current treatments that manage signs and symptoms include predominately broad-acting immunosuppressants, which tend to have deleterious side-effects. Therefore, new drugs with improved efficacy and fewer side-effects are urgently needed.

About Toll-Like Receptors (TLRs) and TLR7

Toll-like receptors (TLRs) are a family of sensors within the innate immune system that detect foreign substances, such as components of bacteria or viruses, and help tailor the most appropriate immune response to clear the infection. Each of the 10 human TLRs specialises in the recognition of selected pathogens.

Aberrant TLR over-activation can fuel the development of autoimmune diseases like systemic lupus erythematosus (SLE)^{1,2,3}. In SLE, TLR7 overactivation has been identified as a cause for many of the disease symptoms. Therefore, it is postulated that the inhibition of TLR7 could be a promising approach to develop a new and more efficacious treatment for SLE. There are currently no clinically-approved TLR7 inhibitors on the market, with only three non-selective candidates (i.e., not selective to TLR7) having recently entered Phase I/II clinical trials^{4,5}.

About Noxopharm

Noxopharm Limited (ASX:NOX) is an innovative Australian biotech company discovering and developing novel treatments for cancer and inflammation.

It has three active drug development programs: its lead clinical-stage drug candidate Veyonda[®], plus two innovative technology platforms, which provide the basis for active development of a growing pipeline of new proprietary drugs.

Noxopharm also has a major shareholding in the US biotech company Nyrada Inc (ASX:NYR), which is active in the areas of drug development for cardiovascular and neurological diseases.

¹ Nature. 2022 Mar, <https://doi.org/10.1038/s41586-022-04642-z>

² Immunity. 2006 Sep;25(3):417-28; Eur. J.

³ Immunol. 2008 Jul;38(7):1971-8

⁴ Pharmacol. Res. Perspect. 2021Oct;9(5):e00842;

⁵ J. Am. Acad. Dermatol. 2021 Apr;84(4):1160-1162

About Hudson Institute of Medical Research

A global bioscience medical research leader, Hudson Institute's sole focus is on powering breakthrough scientific discoveries into improved health care that will transform lives. We strive to improve human health through ground-breaking, collaborative, medical research discoveries and the translation of these to real world impact.

Hudson Institute scientists research five areas of medical need

- Inflammation
- Reproductive health and pregnancy
- Infant and child health
- Cancer
- Hormones and health

To learn more, please visit: noxopharm.com

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Dr Gisela Mautner, CEO and Managing Director of Noxopharm, has approved the release of this document to the market on behalf of the Board of Directors.

Forward Looking Statements

This announcement may contain forward-looking statements. You can identify these statements by the fact they use words such as "aim", "anticipate", "assume", "believe", "continue", "could", "estimate", "expect", "intend", "may", "plan", "predict", "project", "plan", "should", "target", "will" or "would" or the negative of such terms or other similar expressions. Forward-looking statements are based on estimates, projections and assumptions made by Noxopharm about circumstances and events that have not yet taken place. Although Noxopharm believes the forward-looking statements to be reasonable, they are not certain. Forward-looking statements involve known and unknown risks, uncertainties and other factors that are in some cases beyond the Company's control (including but not limited to the COVID-19 pandemic) that could cause the actual results, performance or achievements to differ materially from those expressed or implied by the forward-looking statement.