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ASX Announcement

ECO QUEST REPORTS IMPORTANT PROGRESS WITH CYNATA'S STEM CELL PLATFORM

Eco Quest today announced that its strategic partner, stem cell company Cynata Incorporated, has received positive results from a proof of concept study, indicating a potential role for mesenchymoangioblast (MCA)-based therapeutics in the treatment of Critical Limb Ischemia (CLI).

Cynata has exclusive access to investigate MCAs, discovered by company co-founder, Professor Igor Slukvin, and is in the process of negotiating an exclusive global licence.

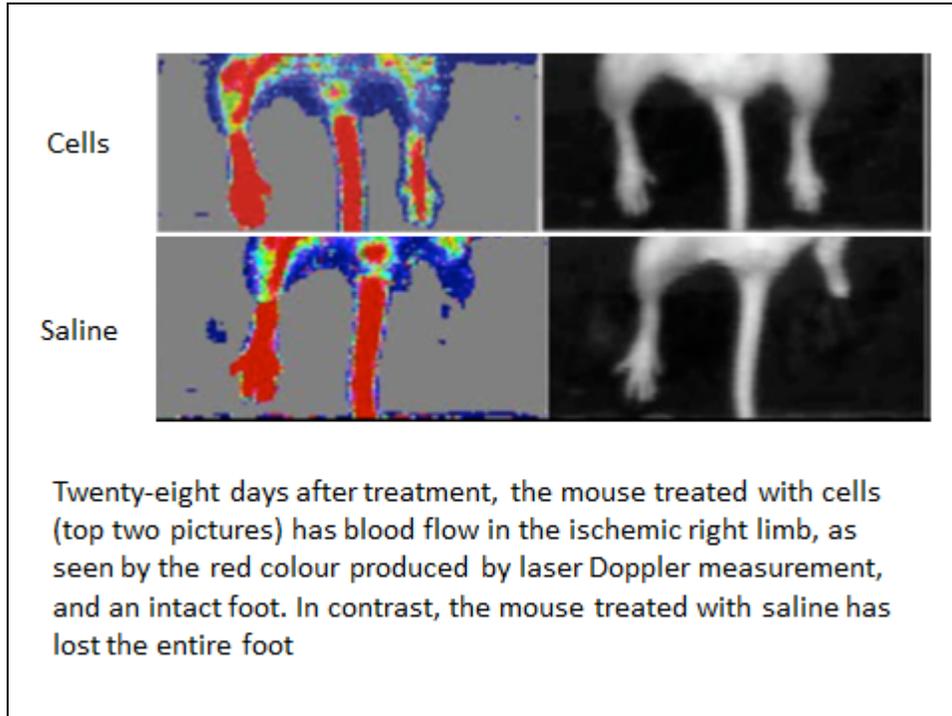
CLI is a disease of poor blood supply (ischemia) to a limb, and is commonly found in diabetic patients. CLI patients suffer severe pain and skin ulcers, and up to 30% will have to undergo a lower limb amputation within a year of diagnosis. The principal goal of CLI management is the avoidance of amputation.

MCAs are critical precursors to the vascular system. Consequently, the company believes that therapeutics derived from these cells will have great utility in treating diseases such as CLI, where restoration of damaged vasculature is key.

In the study, which was conducted by the University of Wisconsin School of Medicine and Public Health, mesenchymal stem cells (MSCs) grown from MCAs were administered to mice with experimentally-induced ischemia in one of their hind legs. The mice were then tested a number of times over the next four weeks, to assess whether or not the injecting the MSCs into the ischemic leg had any impact upon the blood flow and other symptoms.

A number of important results emerged from the study: Cell-treated mice lost significantly fewer nails and toes than did saline-treated control animals. Indeed, whilst the worst that happened to any of the treated mice was a lost toenail, some of the saline-treated animals lost their entire foot.

Laser Doppler device images of blood flow (see picture below) provide an indication of why the saline-treated control mice fared so relatively badly. Blood flow returned to the injured limb much faster in MSC-treated mice, than in those animals treated just with saline. One possible reason for this is the stimulation of new blood vessel formation by the stem cells, which Cynata will investigate further in future experiments.



Finally, at the end of the study, it was seen that the gastrocnemius muscle into which the cells or saline were injected was protected from ischemic injury in the stem-cell treated animals as well as being substantially larger, heavier and more healthy-looking.

“This experiment is an excellent demonstration of the potential effectiveness of Cynata’s cellular therapeutics platform” said Professor Slukvin. “The mouse hind limb ischemia model is widely used as a test for therapies for CLI, and here we can see that Cynata’s MCA-derived MSCs preserved limb form and function. Since prevention of amputation is a key goal of physicians treating CLI, we find this data extremely encouraging”.

Dr Allen Bolland, Cynata CEO agreed. “Cynata’s cellular platform is based upon pluripotent stem cells and has a number of characteristics which make it very attractive as a therapeutic agent. Not the least of these is the potential to make massive quantities of uniform, well characterized, pharmaceutical grade cells in a cost effective manner”, he said. “However, clearly, we also need to know that the cells have therapeutic effect as well. These results give us great confidence to press on with our development programme.”

Howard Digby, executive director of Eco Quest sees these results as a vindication of the Company’s decision to invest in Cynata. “We believe that over the next few years, more stem cell-based medicines will move out of the laboratory into the clinic and begin to improve peoples’ lives. Cynata’s technology has the potential to put it at the forefront of these important developments, and we’re very happy to be playing our part.”



About Eco Quest:

Eco Quest Limited (ASX: ECQ), is a globally focussed environmental and life sciences technology business. It is focused on developing and applying the latest materials and biological technologies to create products, which deliver ecological benefits and enhance our quality of life.

About Cynata Incorporated:

Cynata is a California-incorporated company commercialising an off-the-shelf stem cell platform discovered by scientists at the University of Wisconsin, Madison. The company is focused in particular on complications associated with diabetes.

For more information about Eco Quest visit www.ecoquest.com.au.

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