



**Living Cell Technologies Limited**

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**LCT's biocapsule reviewed in international journal *Biomaterials***

*ASX Announcement – 21 February, 2006, Melbourne, Australia:*

Living Cell Technologies Limited (ASX: [LCT](#)) today announced a scientific paper reviewing its biocapsule technology has been accepted in the international journal *Biomaterials*.

"We are very pleased that an outstanding journal such as *Biomaterials* has agreed to publish our work describing a novel means of evaluating the stability of implanted alginate biocapsules," said Dr Chris Thanos, lead author of the article and Director Research & Development, LCT BioPharma.

Over the last 20 years, there has been remarkable progress in alginate microencapsulation in protein and cell therapy for the treatment of various diseases; however the system has been unpredictable making stability and reproducibility of the material difficult.

The manuscript outlines how LCT has characterised and purified the alginate supply into a highly specialised method of encapsulation.

The original work covered a range of novel alginates and begins to unravel the factors that affect viability and durability of the capsules, enabling LCT to further control biocapsule function and the rate of degradation.

"We now have greater understanding and control over the longevity and robustness of the capsules to regulate their life as a product," said Dr Thanos.

LCT's biocapsule regulates what factors and nutrients can pass through the wall of the capsule, providing a barrier between the introduced cells and the recipient's immune system.

To date, the greatest issue with cell transplantation has been the shortage of organs and problems with immune rejection.

"LCT has overcome both of these barriers, which could revolutionise the field," said LCT's CEO, David Collinson.

With the use of LCT's biocapsule technology, a variety of cell types are able to be transplanted and function in the human body for extended periods of time without the use of immunosuppressive drugs.

The encapsulation process has also been scaled for manufacture within LCT's accredited GMP (good manufacturing practice) facility. LCT has filed a new patent to protect the novelty of its alginate technology.

"This provides LCT with a significant delivery platform for its cell therapy products and enables future licensing opportunities," said Mr Collinson.



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### **Further Information:**

#### **About Living Cell Technologies: [www.lctglobal.com](http://www.lctglobal.com)**

*Living Cell Technologies Ltd (ASX: LCT) develop live cell therapy products to treat life threatening human diseases. The ASX listed, vertically integrated company operates globally through offices in Australia, New Zealand and the United States.*

*LCT focuses on developing treatments where healthy living cells are injected into patients to replace or repair damaged tissue, without requiring the use of toxic drugs to prevent rejection. The company's product portfolio focuses on treatments for people with Huntington's disease, insulin-dependent diabetes and haemophilia.*

*The company is currently preparing US Food and Drug Administration (FDA) Investigational New Drug (IND) applications for phase 1 clinical trials for its Huntington's disease and diabetes portfolio products, NeurotrophinCell and DiabeCell using the alginate encapsulation technology.*

#### **About Biomaterials:**

*Biomaterials is an international journal covering the science and application of biomaterials and associated medical devices. It is the aim of the journal to provide a peer-reviewed forum for the publication of original papers and authoritative review papers dealing with the most important issues facing the use of materials in clinical practice. The journal is relevant to all applications of biomaterials including implantable medical devices, tissue engineering and drug delivery systems.*