



**Living Cell Technologies (LCT) is an Australasian biotechnology company developing cell therapies for neurodegenerative diseases**

## The business

- LCT is listed on the Australian (ASX: LCT) and US (OTCQX: LVCLY) stock exchanges. The company is incorporated in Australia, with its research and development, and operations based in New Zealand.
- LCT is developing NTCELL<sup>®</sup> for neurodegenerative diseases.
- LCT has formed a 50:50 joint venture with international pharmaceutical company Otsuka Pharmaceutical Factory, Inc. (OPF), to further develop DIABECELL<sup>®</sup>.

## Product pipeline and key milestones

- LCT currently has NTCELL<sup>®</sup> for Parkinson's disease, in clinical development.
- LCT is also investigating applications for NTCELL in other degenerative conditions, including Huntington's, Alzheimer's and motor neurone diseases.

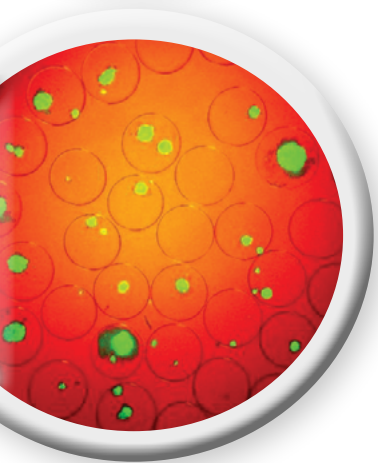
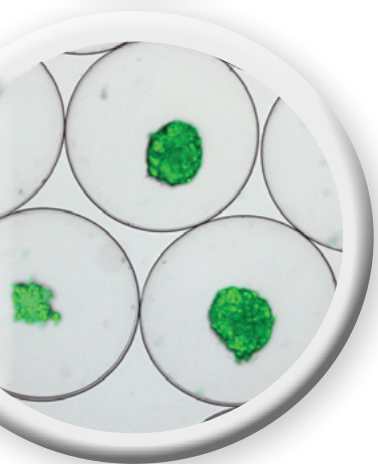
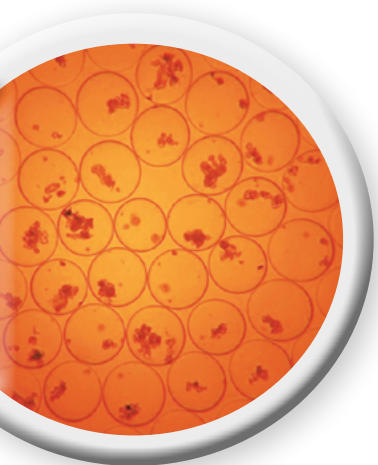
## Financial information

### **DIABECELL partnership**

- In 2011, LCT formed an A\$50m partnership with OPF, establishing the NZ 50:50 joint venture Diatranz Otsuka Limited (DOL).
- LCT transferred DIABECELL IP into the DOL joint venture.
- OPF invested A\$25m to fund the ongoing development of DIABECELL.

## The science

- LCT's product pipeline consists of cell therapies developed from cells sourced from the unique herd of designated pathogen-free pigs bred from stock originally discovered in the remote sub-Antarctic Auckland Islands.
- LCT's unique proprietary technology, IMMUPEL<sup>™</sup>, coats cells with protective capsules that prevent them from attack by the patient's immune system. This allows the use of cell therapies without the need for co-treatment with drugs that suppress the immune system, which often have negative side-effects.
- IMMUPEL technology has potential applications across the medical spectrum, including type 1 diabetes, Parkinson's disease and Huntington's disease.





## NTCELL

- NTCELL is a unique cell therapy with exciting preclinical results that demonstrate it can regenerate damaged tissue.
- NTCELL is initially being developed to offer people with Parkinson's disease the hope of being able to halt disease progression and restore quality of life.



### The need

- Estimated number of people who suffer from Parkinson's disease:
 

New Zealand	10,000
Australia	64,000
Worldwide	4,000,000
- The global market for the current standard treatment for Parkinson's disease – dopamine replacement – is approximately A\$2 billion p.a.

### The product

- NTCELL has shown a powerful ability to regenerate tissue and restore function in animal models of Parkinson's disease, stroke, Huntington's disease, hearing loss and other non-neurological conditions, such as wound healing.
- NTCELL is in Phase I/IIa clinical trials in New Zealand for Parkinson's disease.



## DIABECELL

- DIABECELL is a breakthrough cell therapy that has the potential to be life changing for the millions of people with type 1 diabetes.



### The need

- Estimated number of adults who suffer from type 1 diabetes:
 

New Zealand	17,000
Australia	106,000
Worldwide	8,000,000
- Type 1 diabetes usually requires life-long treatment with regular insulin injections.
- The current total market worldwide for injected insulin for type 1 diabetes is approximately A\$2 billion p.a.
- Up to 15% of people with type 1 diabetes cannot keep their blood glucose within safe levels using standard treatment and are at particular risk of sudden and unaware hypoglycaemia – when their blood glucose falls to dangerous levels without any sign or symptom that this is happening.

### The product

- DIABECELL contains porcine insulin-producing cells, which when transplanted into the patient's body, begin to secrete insulin in response to rises in glucose.
- In clinical trials in people with type 1 diabetes, DIABECELL has been shown to:
  - significantly reduce unaware hypoglycaemia.
  - reduce the amount of insulin that patients need to inject.
  - improve overall glucose control, as shown by stabilisation or a decrease in HbA1c.

For more information visit [www.lctglobal.com](http://www.lctglobal.com) or follow @lctglobal on Twitter.

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