



# Changing lives with cell therapy

---

## **Australia Biotech Invest 2013**

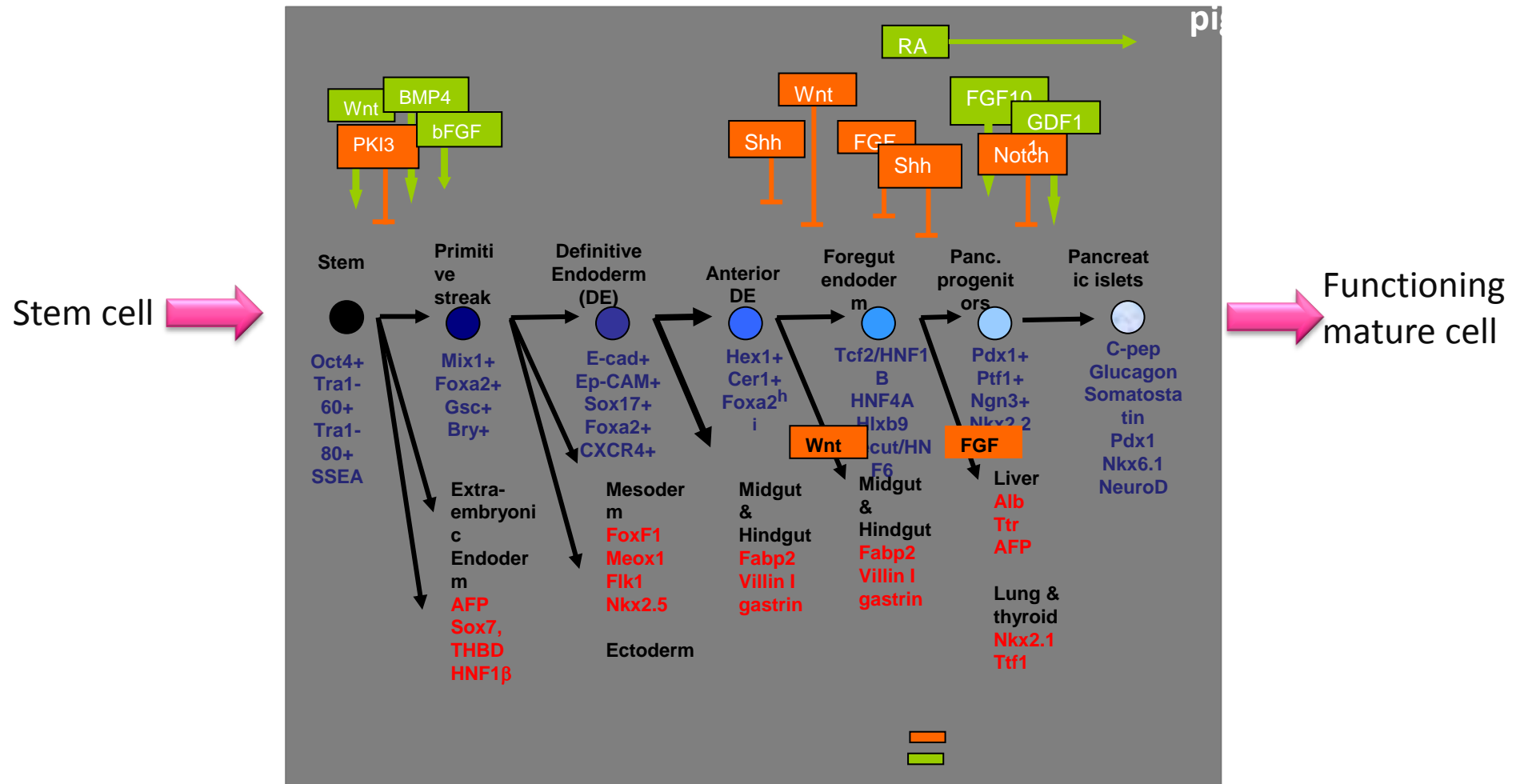
Dr Andrea Grant, Managing Director

ASX:LCT | OTCQX: LVCLY | [www.lctglobal.com](http://www.lctglobal.com) |  LCTglobal

# Cell therapy – the fourth pillar of healthcare



# Stem cell therapies require substantial genetic manipulation of cells



# Primary cells from disease-free herd

---



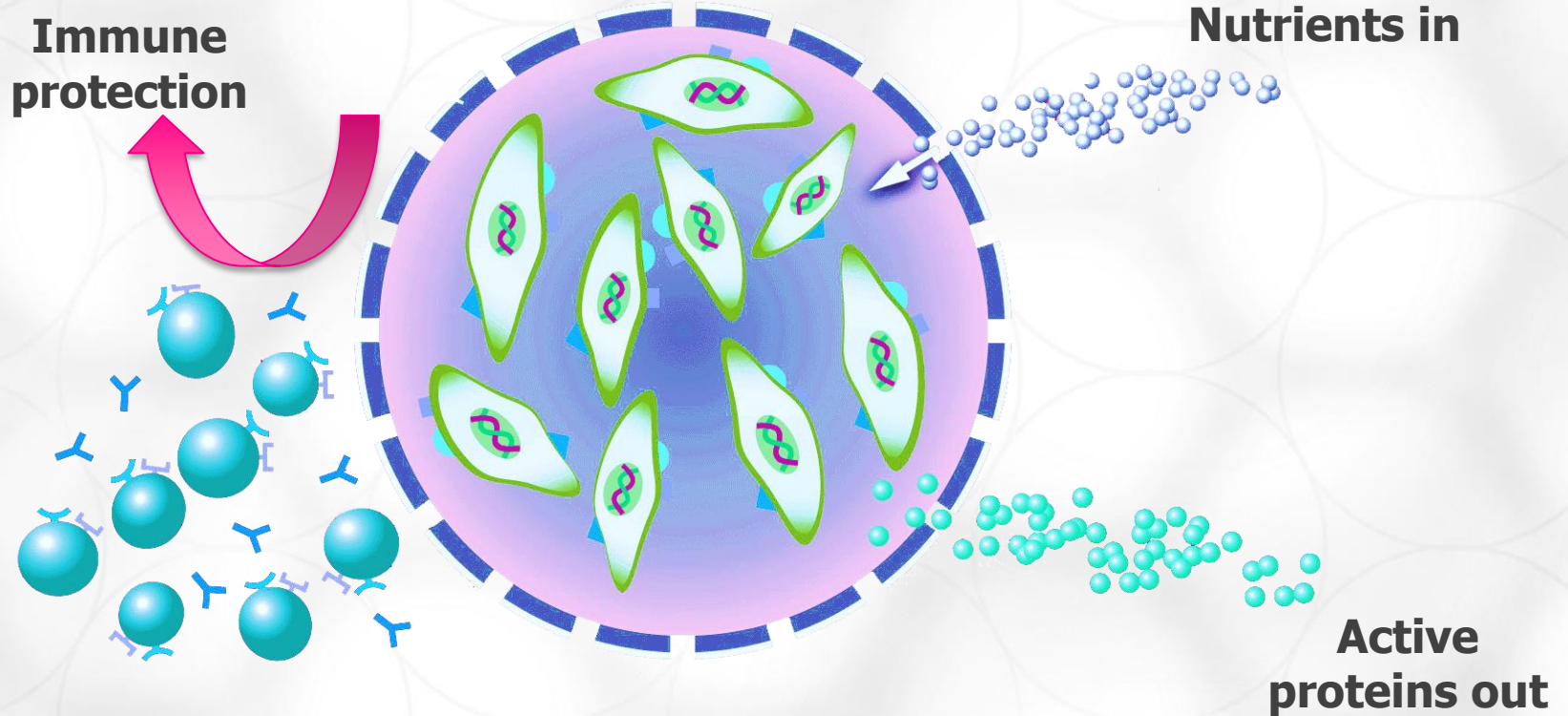
**Insulin: Type I diabetes**

**Heparin: Blood thinning**

**Factor VI: Blood clotting**

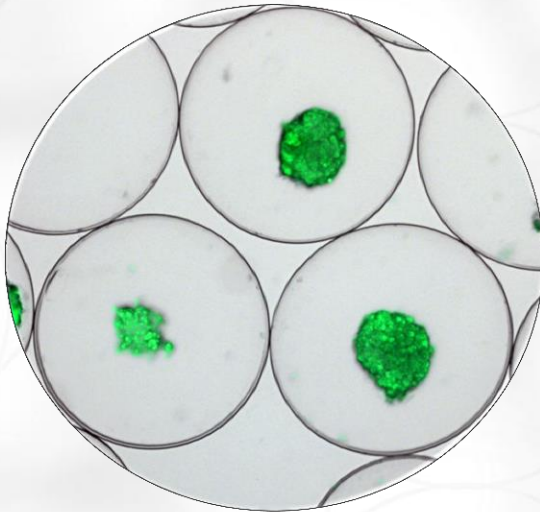
**Tissue grafts & wound healing**

# Encapsulation = No immunosuppressants



First product in clinical development

---

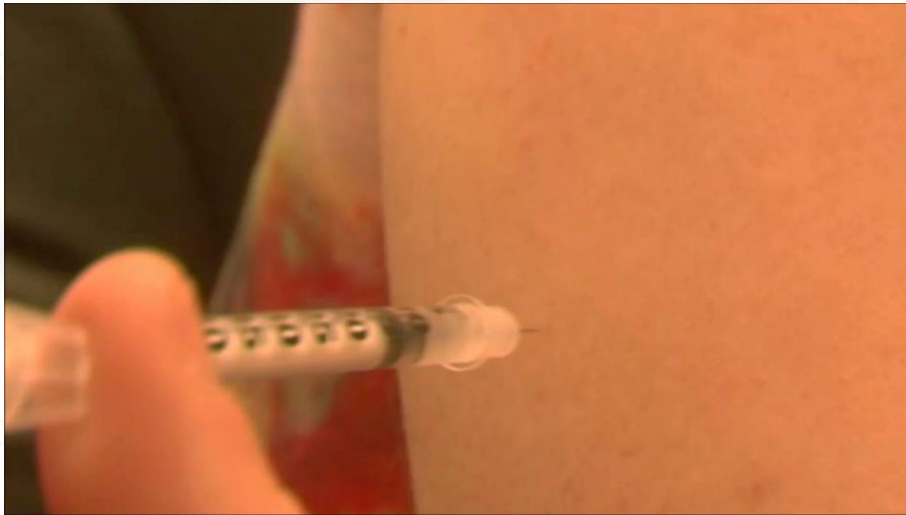


**DIABECCELL®**

BREAKTHROUGH IN **TYPE 1 DIABETES**

# Type I diabetes

---



**Auto-immune destruction of insulin producing islets**

**Encapsulated pig islets replace glucose regulation**

**No toxic immunosuppressants**

# Progress towards market



Trial	Endpoint	Country	# patients	Status
DIA-04	Safety	Russia	10	Complete
DIA-06	Safety & dose finding	NZ	16	Complete
DIA-09	Safety & dose finding	Argentina	8	Results expected Oct 2013
DIA-14	Efficacy	NZ, Aus, Singapore	30-60	In preparation



# JV partnership with top- tier Japanese Pharma



**Formed 2011**

**50% control=50% profits**

**OPF invested AU\$25m to date**

**JV funds clinical development**

**Potential for additional AU\$20m**







**Clinical development de-risked**



# Juvenile Diabetes Cure Alliance

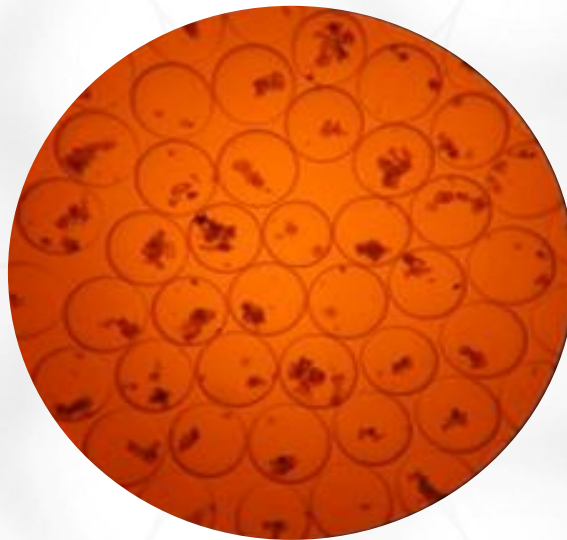


**“Of 332 projects in human clinical trials, only 6 target a type 1 diabetes practical cure”** *www.thejdca.org*

Project Name	Description	Location
DIABECCELL	Transplanted porcine islets that are micro-encapsulated	
Monolayer Cellular Device	A beta cell encapsulation approach that uses human islets	
ATG/GCSF	Drug combination aimed at stopping both the autoimmune attack and stimulating growth of beta cells	
Sitagliptin/ Lansoprazole	Drug combination aimed at stopping both the autoimmune attack and stimulating growth of beta cells	
BCG	Drug that kills disease-causing autoimmune cells and restores pancreatic beta-cell function through regeneration	
Stem Cell Educator	An individual's blood is treated with stem cells which has the effect of reversing autoimmunity and stimulating beta cell growth	

# Second product in clinical development

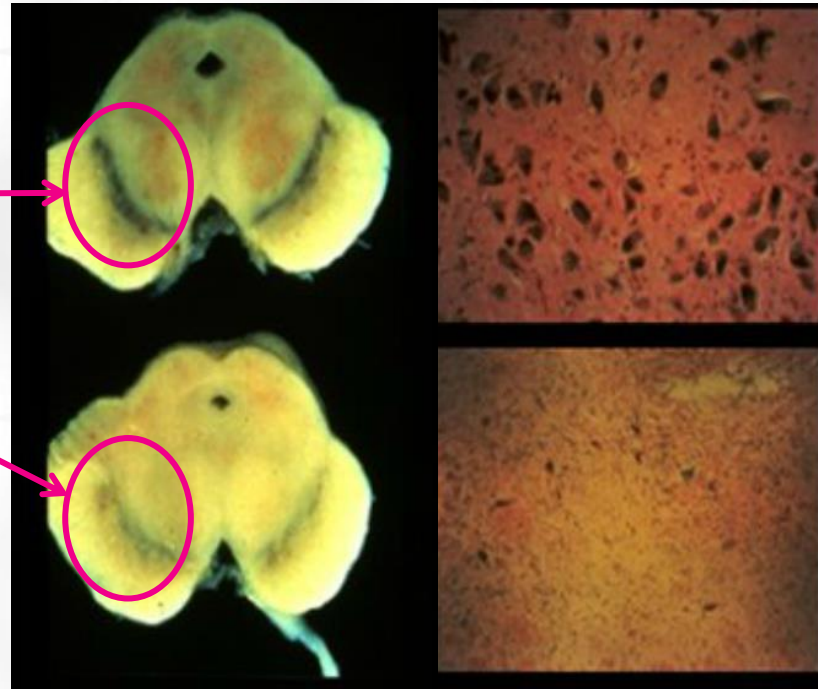
---



## **NTCELL<sup>®</sup>**

NEW HOPE IN **PARKINSON'S DISEASE**

# Loss of dopamine neurons



**No  
Parkinson's**

**Parkinson's**

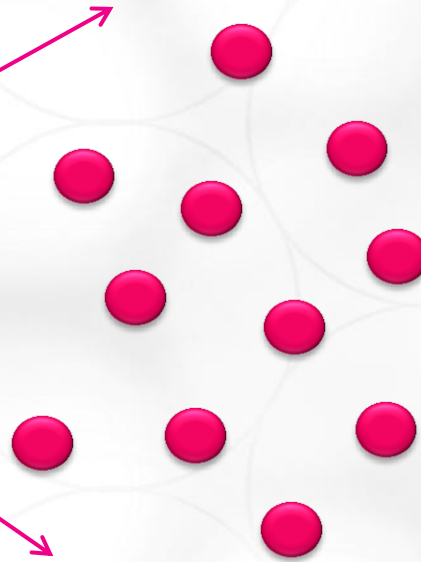
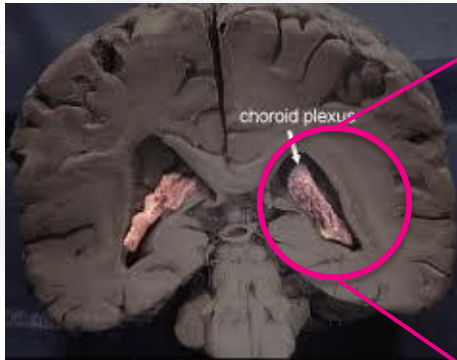
# Parkinson's disease

## "The saddest of all diseases"

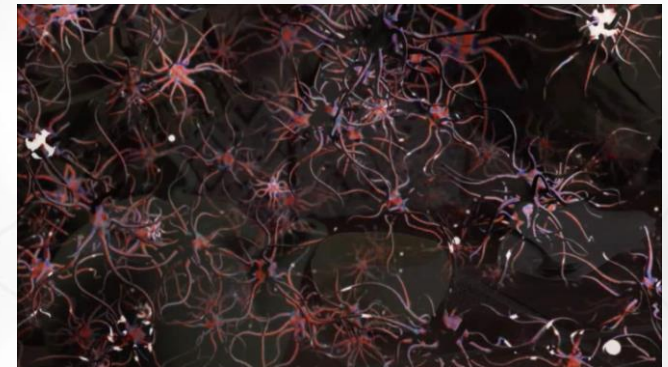
---



# Choroid plexus = growth factor factory

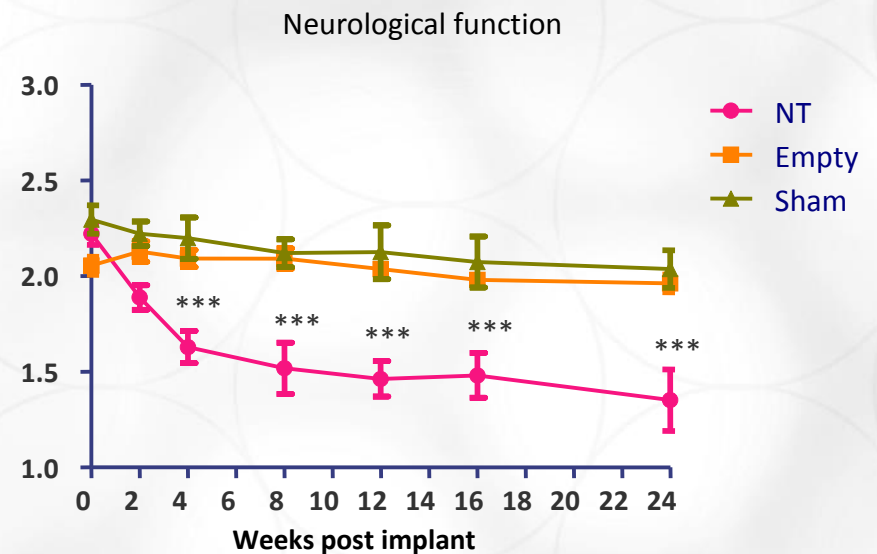
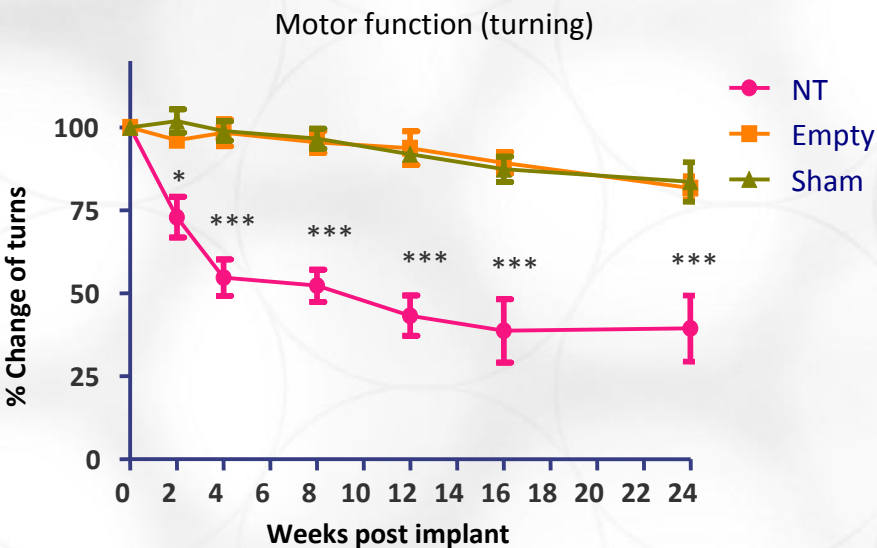


**100's of growth factors**



**Nerve regeneration**  
**Stem cell differentiation**  
**Protection from cell death**

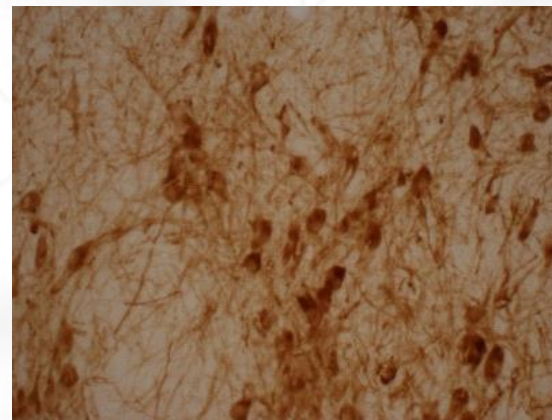
# >50% improvement in primate models



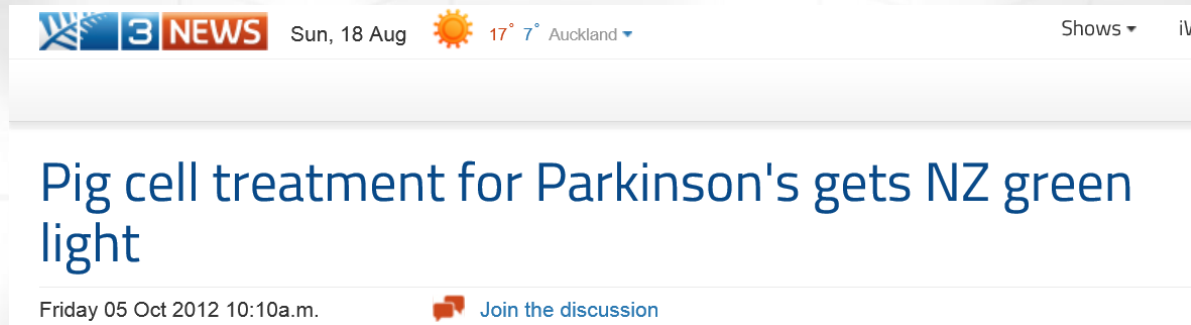
**Control**



**NT**



# NTCELL for Parkinson's Phase I underway



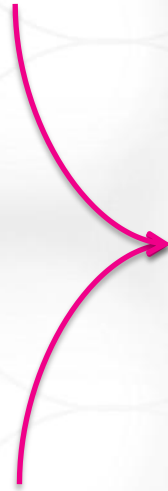
**4 patients – SAFETY study**

**First implant safely completed Sept 2013**

**Provided safety demonstrated – we will aim for fast track/breakthrough designation with FDA**



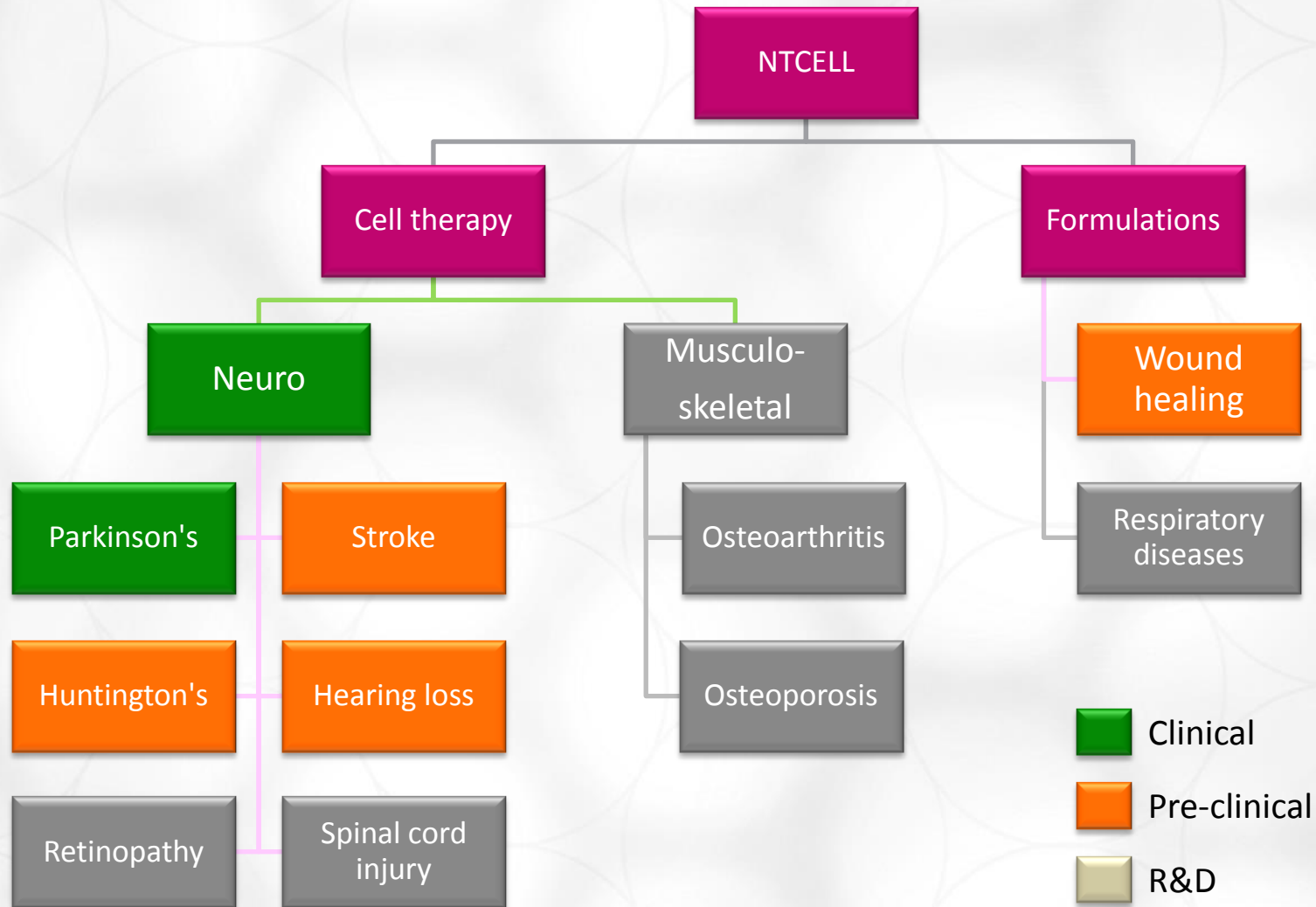
# NTCELL co-development partnership in NTCELL



**Up to \$5m option fee**  
**OPF funds Phase I clinical trial**  
**Clinical development de-risked**



# LCT is developing NTCELL for a range of degenerative disorders



# Invest in a leader



**Diversify your cell therapy portfolios**

**Advanced in clinic**

**Diseases with high unmet need**

**Global pharma partner**

# SAFE HARBOR STATEMENT

---



This document contains certain forward-looking statements, relating to LCT's business, which can be identified by the use of forward-looking terminology such as "promising", "plans", "anticipated", "will", "project", "believe", "forecast", "expected", "estimated", "targeting", "aiming", "set to", "potential", "seeking to", "goal", "could provide", "intends", "is being developed", "could be", "on track", or similar expressions, or by express or implied discussions regarding potential filings or marketing approvals, or potential future sales of product candidates. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no assurance that any existing or future regulatory filings will satisfy the FDA's and other health authorities' requirements regarding any one or more product candidates nor can there be any assurance that such product candidates will be approved by any health authorities for sale in any market or that they will reach any particular level of sales. In particular, management's expectations regarding the approval and commercialization of the product candidates could be affected by, among other things, unexpected clinical trial results, including additional analysis of existing clinical data, and new clinical data; unexpected regulatory actions or delays, or government regulation generally; our ability to obtain or maintain patent or other proprietary intellectual property protection; competition in general; government, industry, and general public pricing pressures; and additional factors that involve significant risks and uncertainties about our products, product candidates, financial results and business prospects. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated or expected. LCT is providing this information as of the date of this presentation and does not assume any obligation to update any forward-looking statements contained in this document as a result of new information, future events or developments or otherwise.