

***Please Note:** The mock news story below is strictly fictional. Any resemblance between the names herein and real persons or companies is purely coincidental.*

## **The Edinburgh Herald**

Friday, 13<sup>th</sup> April 2007

### **New hope for Parkinson's treatment**

By Cameron MacDonald

*A Scottish company is ready to use umbilical cord blood to treat patients with Parkinson's disease*

Scotland-based Lifebank Therapeutics plc wants to test nerve cells obtained from umbilical cord blood on Parkinson's disease patients.

The company has filed an application to begin initial clinical studies in the United Kingdom. If approved by the regulatory authorities, this will be the first ever clinical study of its kind in the world, and, if successful, opens the door to cord blood-based stem cell therapies being available to patients in just five years.

In the clinical trial, cells will be transplanted directly into the damaged region of the brain of a small group of patients, who do not respond to existing treatments. The study will assess whether the treatment is safe, determine safe dosages and identify any side effects.

The cells to be injected into patients have been obtained from umbilical cord blood samples harvested at birth and stored in the private cord blood bank run by Lifebank Therapeutics. They are the exact cells that die in Parkinson's disease, which produce the natural chemical dopamine, and are present in the region of the brain called the substantia nigra.

Jane Smith, Chief Scientific Officer of Lifebank Therapeutics plc said "Our studies validate the storage of a baby's cord blood. It is like taking out a natural life insurance policy, since the stem cells in cord blood may realistically be used in the future to treat a range of life-threatening or debilitating diseases."

**THE STEM CELL DREAM**  
at the Edinburgh International Science Festival 2007  
Royal Museum Lecture Theatre  
13 April 2007

Parkinson's disease is a progressive neurodegenerative disease that results in severe physical disability, and occasionally psychiatric problems, such as dementia and depression.

There are around 120,000 people with Parkinson's disease in the UK. The disease is more prevalent in older people, but of the 10,000 diagnosed every year in the UK, 1 in 7 are under the age of 50 and 1 in 20 are under 40.

Jane Smith is confident that their clinical study will be given the go ahead. She said, "Because umbilical cord blood is a readily available, ethically acceptable source of stem cells, our clinical study will pave the way for more widespread applications of cord blood stem cells in treatment of neurological disorders.'

But John Know, director of the Stem Cell Centre at the University of Edinburgh, views Lifebank Therapeutics' plans with strong scepticism and cautions against premature use of stem cells on patients.

"There is still much to be learnt about stem cells before effective treatments can be developed, in which risks to the patients are minimal. Rushing to the clinic may seriously damage prospects for future clinical trials'.

Lifebank Therapeutics plans were welcomed by the Association of Parkinson's Patients. Peter Hare, its Medical Director, said, "We welcome all efforts to find alternative treatments for Parkinson's disease, which are safe and effective. Our hope is that, in reviewing this application, the regulatory bodies will examine in detail the potential of stem cells in umbilical cord blood to treat the disease and so provide an outcome that will benefit patients."