



# Intellectual Property Office

## ERYTHROPOIETIN ADMINISTRATION TO IMPROVE GRAFT SURVIVAL

**Technology Reference**  
R060

**Keywords**  
Transplantation

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**Field**  
Neuroscience

**Patent Status**  
US Patent Application  
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The invention provides a novel method for increasing the survival of graft cells that are implanted into a defect site. The invention involves conditioning the cells of a cell graft with an effective amount of exogenous erythropoietin or an analog thereof to increase the survival of the transplanted cells. This method may be utilized to improve treatment of numerous neurological disorders.

### AREAS OF APPLICATION

The administration of erythropoietin can be useful in improving the survival of cells grafted to the brain or spinal cord in an effort to treat numerous neurological disorders such as:

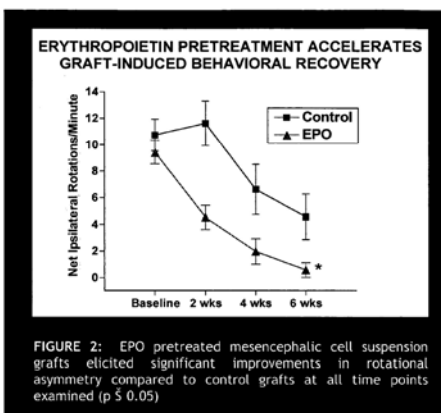
- Parkinson's disease
- Alzheimer's disease
- Huntington's disease
- Multiple sclerosis
- Epilepsy
- Traumatic brain or spinal cord injury

### ADVANTAGES

- Significantly accelerated graft-induced behavioral recovery
- Significantly increased percentage of graft cell survival

### THE TECHNOLOGY

The invention involves culturing cells of a cell graft in the presence of an effective amount of exogenous erythropoietin or an analog thereof prior to transplantation of the cell graft into a compatible recipient tissue, thereby increasing the survival rate of cells of the tissue graft, particularly once the cells have been transplanted. The invention also allows for erythropoietin to be effectively administered simultaneously or subsequent to transplantation of the cell graft.



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