



Stem Cells International

Special Issue on

Stem Cells and Neurodegenerative Diseases

CALL FOR PAPERS

Over the past 3 decades, there has been a revolution in our ability to make stem cells from different sources and use them for therapeutic gain in disorders of the brain. These cells, which are defined by their capacity to proliferate indefinitely as well as differentiate into selective phenotypic cell types, are viewed as being especially attractive for studying disease processes and for grafting in patients with chronic incurable neurodegenerative disorders of the central nervous system (CNS) such as Parkinson's disease (PD). Stem cells raise the possibility of replacing and restoring cells lost in disease processes of the CNS, most notably for PD, where trials to replace the lost nigral dopaminergic neurons using fetal ventral mesencephalic grafts have been proven efficacious in some cases. Stem cells have also been used as catalysts of endogenous repair in clinical trials for other neurodegenerative conditions, such as Huntington's disease and Alzheimer's disease. However, stem cell therapy is considered to be controversial for its ethical, technical, efficacious, and safe debates. Thus, further investigation in this subject will clarify several aspects of the implication of stem cell therapy in neurodegeneration and contribute to the development of future therapies for neurodegenerative sufferers.

We invite investigators to contribute original research articles as well as review articles that will help resolving the scientific, technical, ethical, regulatory, and logistic issues in the use of stem cells for neurodegenerative disorders.

Potential topics include, but are not limited to:

- ▶ Explorations of new sources of stem cells for neurodegenerative disorders
- ▶ Research in improving the efficacy of the grafts
- ▶ Research about the safety issues regarding stem cells treatment for neurodegenerative diseases, such as tumor formation
- ▶ Research on developing protocols that allow generation of fully functional and safe neurons from stem cells
- ▶ Research in developing standardized and efficient protocols and adapting these protocols to good laboratory practice or manufacturing practice
- ▶ Research about IPS and neurodegenerative diseases
- ▶ Research on moving stem cells therapy closer to clinical translation
- ▶ Research about graft-induced dyskinesias in PD
- ▶ Nonintegrating reprogramming methods to generate iPSCs
- ▶ Reprogramming methods that skip the transition to iPSCs before redifferentiation into a specific cell types, such as neural cells

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/sci/scnd/>.

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Manuscript Due

Friday, 22 May 2015

First Round of Reviews

Friday, 14 August 2015

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Friday, 9 October 2015