

AllExcel, Inc., USA

Background: Parkinson's disease is caused by the progressive impairment or deterioration of neurons (nerve cells) in an area of the brain known as Substantia Nigra.

Objective: Curative therapy for Parkinson's disease; Current therapies are based on dopamine supplementation in the brain. They are only palliative, and require adjunct therapies to minimize side effects. Yet long term side effects such as motor neuron defect and Bradykinesia, Dyskinesia etc occur; Cell Replacement therapy is the only approach that promises functional reversal of Parkinson's disease.

Methodology: AllExcel, Inc. has developed a platform technology for developing designed, functionally improved cell lines without the use of viral vectors or DNA manipulation. Technology is based on concepts derived from naturally observed Human Cell-Cell Interactions (CCITM).

Results: Fast growing potent Dopaminergic cell lines have been produced with long survival in cell culture. In animal studies (6-OHDA treated Rat model for PD), four different clones showed very effective reversal of the disease.

Conclusion: Highly potent modified neural cells have been produced in our lab to treat PD patients.