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(54) Title: DOPAMINERGIC NEURONS AND PROLIFERATION-COMPETENT PRECURSOR CELLS FOR TREATING PARKINSON'S DISEASE

(57) Abstract: This disclosure provides improved methods for obtaining populations of neural progenitor cells and differentiated neurons from pluripotent stem cells. The technology can be used to produce progenitors that proliferate through at least 40 doublings, while maintaining the ability to differentiate into a variety of different neural phenotypes. Cell populations have been obtained that contain a high proportion of cells staining for tyrosine hydroxylase, which is a feature of dopaminergic neurons. The neural progenitors and terminally differentiated neurons of this invention can be generated in large quantities for use in drug screening and the treatment of clinically important neurological disorders, such as Parkinson's disease.