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(54) Title: NEUROPROTECTIVE EFFECTIVE COMPOUND

(57) Abstract: The present application discloses a method of preventing degeneration of nerve, which includes: a) generating a recombinant viral or plasmid vector comprising a DNA sequence encoding a member of a transforming growth factor superfamily or neurotrophic factor proteins operatively linked to a promoter; b) transfecting *in vitro* a population o cultured cells with the recombinant vector, resulting in a population of the cultured cells; and c) transplanting the transfected cells to an area near an injured nerve, such that expression of the DNA sequence within the area near the injured nerve causes prevention o degeneration of the nerve.

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