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(54) Title: NERVE REGENERATION

(57) Abstract: The present application describes a method of regenerating nerve, which steps include generating a recombinant viral or plasmid vector comprising a DNA sequence encoding a member of a transforming growth factor superfamily of proteins operatively linked to a promoter; transfecting *in vitro* a population of cultured cells with the recombinant vector, resulting in a population of the cultured cells; and 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 regeneration of the nerve.

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