Claims

1. Use of a composition, comprising as an active ingredient, two or more isoforms of hepatocyte growth factor (HGF) or a polynucleotide encoding the isoforms, wherein the two or more isoforms of HGF include full-length HGF (flHGF) comprising the amino acid sequence of SEQ ID NO: 1, and the deleted variant HGF (dHGF) comprising the amino acid sequence of SEQ ID NO: 2, in the manufacture of a medicament for the prevention or treatment of amyotrophic lateral sclerosis in a mammal.

2. The use of claim 1, wherein the polynucleotide includes a sequence corresponding to exon 1 to exon 18 of a human HGF gene, and intron 4 of a human HGF gene or its fragment as a sequence additionally inserted between exon 4 and exon 5.

3. The use of claim 2, wherein the polynucleotide includes a nucleotide sequence selected from the group consisting of SEQ ID NO: 3 to SEQ ID NO: 10.

4. The use of claim 3, wherein the polynucleotide includes a nucleotide sequence of SEQ ID NO: 9.

5. The use of claim 1, wherein the mammal is a human, and the polynucleotide is administered at a dose of 1 μg to 2500 mg.

6. The use of claim 1, wherein the two or more isoforms of HGF are encoded by separate nucleotide sequences.

7. The use of claim 1, wherein the two or more isoforms of HGF are encoded by a single nucleotide sequence.

8. The use of claim 1, wherein the polynucleotide is naked DNA, or is contained in a gene delivery system.

9. The use of claim 8, wherein the gene delivery system is a vector.

10. The use of claim 9, wherein the vector is a plasmid.

11. The use of claim 10, wherein the vector is pCK.