Annex 1

EP (UK) 2 305 711

Claims

1. Use of an effective amount of an anti-NGF antagonist antibody in the manufacture of a medicament for improving physical function in an individual having osteoarthritis.

2. Use of an effective amount of an anti-NGF antagonist antibody in the manufacture of a medicament for treating pain, improving physical function and improving stiffness in an individual having osteoarthritis.

3. The use of claim 1 or 2, wherein the individual is a human.

~~4. The use of any one of claims 1 to 3, wherein the anti-NGF antibody is prepared to be administered at a dosing frequency in a range from once every week to once every twelve weeks.~~

~~5.~~4. The use of any one of claims 1 to 3 ~~4~~, wherein the anti-NGF antibody is prepared to be administered at a dosing frequency of once every eight weeks.

~~6. The use of any one of the preceding claims, wherein the anti-NGF antibody is prepared to be administered at a dose in a range from 3 µg/kg to 1 mg/kg.~~

~~7. The use of claim 6, wherein the anti-NGF antagonist antibody is prepared to be administered at a dose of 100 µg/kg or of 300 µg/kg.~~

~~8.~~5. The use of any one of the preceding claims, wherein the anti-NGF antibody is administered intravenously or subcutaneously.

~~9.~~6. The use of any one of the preceding claims, wherein the anti-NGF antibody binds human NGF.

~~10. The use of claim 9, wherein the anti-NGF antibody further binds rodent NGF.~~

~~11.~~7. The use of any one of the preceding claims, wherein the anti-NGF antibody blocks the interaction of human NGF with trkA and/or p75.

~~12.~~8. The use of any one of the preceding claims , wherein the anti-NGF antibody competes for binding to human NGF with an antibody comprising the amino acid sequences of SEQ ID NO: 1 and 2.

~~13.~~9. The use of any one of the preceding claims, wherein the anti-NGF antibody binds essentially the same human NGF epitope as an antibody comprising the amino acid sequences of SEQ ID NO: 1 and 2.

~~14.~~10. The use of any one of the preceding claims, wherein the anti-NGF antibody binds to an NGF epitope comprising one or more of: residues K32, K34 and E35 of human NGF; residues Y79 and T81 of human NGF; residues H84 and K88; residue R103 of human NGF; residue E11 of human NGF; Y52 of human NGF; residues L112 and S113 of human NGF; residues R59 and R69 of human NGF; or residues V18, V20, and G23 of human NGF.

~~15~~11. The use of any one of the preceding claims, wherein the anti-NGF antibody:

(a) binds NGF with a K_D of less than 2 nM;

(b) inhibits human NGF-dependent survival of mouse E13.5 trigeminal neurons with an IC50 of 100 pM or less, wherein the IC50 is measured in the presence of 15 pM human NGF; and

(c) inhibits human NGF-dependent survival of mouse E13.5 trigeminal neurons with an IC50 of 10 pM or less, wherein the IC50 is measured in the presence of 1.5 pM of NGF.

~~16~~12. The use of any one of the preceding claims, wherein the anti-NGF antibody comprises a heavy chain variable region comprising:

(a) a CDR1 region shown in SEQ ID NO: 3;

(b) a CDR2 region shown in SEQ ID NO:4; and

(c) a CDR3 region shown in SEQ ID NO:5; and

a light chain variable region comprising:

(a) a CDR1 region shown in SEQ ID NO:6;

(b) a CDR2 region shown in SEQ ID NO:7; and

(c) a CDR3 region shown in SEQ ID NO:8.

~~17~~13. The use of any one of the preceding claims, wherein the anti-NGF antibody is an antibody comprising the amino acid sequences shown in SEQ ID NOS: 1 and 2.

~~18~~14. The use of claim ~~17~~13, wherein the anti-NGF antibody is an antibody comprising the amino acid sequences shown in SEQ ID NOS: 16 and 17.

~~19~~15. A kit comprising an effective amount of an anti-NGF antagonist antibody and instructions for administering an effective amount of the anti-NGF antagonist antibody to an individual having osteoarthritis for use in improving physical function in the individual.

~~20~~16. A kit comprising an effective amount of an anti-NGF antagonist antibody and instructions for administering an effective amount of the anti-NGF antagonist antibody to an individual having osteoarthritis for use in treating pain, improving physical function and improving stiffness in the individual.

~~21~~17. A pharmaceutical composition comprising an anti-NGF antagonist antibody and a pharmaceutically acceptable carrier for use in improving physical function in an individual having osteoarthritis.

~~22~~18. A pharmaceutical composition comprising an anti-NGF antagonist antibody and a pharmaceutically acceptable carrier for use in treating pain, improving physical function and improving stiffness in an individual having osteoarthritis.

~~23~~19. An anti-NGF antagonist antibody for use in improving physical function in an individual having osteoarthritis.

~~24~~20. An anti-NGF antagonist antibody for use in treating pain, improving physical function and improving stiffness in an individual having osteoarthritis.