

CLAIMS

1. Use of a humanized anti-PACAP (Pituitary Adenylate Cyclase-Activating Polypeptide) antibody or antigen binding fragment thereof in the manufacture of a medicament for the treatment of headache, migraine or photophobia,

wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises: heavy chain variable region polypeptide having at least 90% identity to SEQ ID NO: 1322 and a light chain variable region polypeptide having at least 90% identity to SEQ ID NO: 1342,

wherein said heavy chain variable region comprises the heavy chain complementarity-determining region (CDR) 1 polypeptide of SEQ ID NO: 1324, the heavy chain CDR2 polypeptide of SEQ ID NO: 1326, and the heavy chain CDR3 polypeptide of SEQ ID NO: 1328, and said light chain variable region comprises the light chain CDR1 polypeptide of SEQ ID NO: 1344, the light chain CDR2 polypeptide of SEQ ID NO: 1346, and the light chain CDR3 polypeptide of SEQ ID NO: 1348, and

wherein the humanized anti-PACAP antibody or antigen binding fragment thereof is to be administered to a subject in need thereof.

2. The use of claim 1, wherein the subject has a condition selected from:

(i) migraine with aura, migraine without aura, hemiplegic migraines, cluster headaches, migrainous neuralgia, chronic headaches, chronic migraine, medication overuse headache, tension headaches, general headaches, hot flush, photophobia, chronic paroxysmal hemicrania, secondary headaches due to an underlying structural problem in the head, secondary headaches due to an underlying structural problem in the neck, cranial neuralgia, sinus headaches, headache associated with sinusitis, allergy-induced headaches, allergy-induced migraines, trigeminal neuralgia, postherpetic neuralgia;

(ii) a nervous system-related or neurological condition associated with photophobia selected from the group consisting of autism spectrum disorders, Chiari malformation, dyslexia, encephalitis, meningitis, subarachnoid hemorrhage, tumor of the posterior cranial fossa, ankylosing spondylitis, albinism, ariboflavinosis, benzodiazepines, chemotherapy, chikungunya, cystinosis, Ehlers-Danlos syndrome, hangover, influenza, infectious mononucleosis, magnesium deficiency, mercury poisoning, migraine, rabies, and tyrosinemia type II; or

(iii) a photophobia associated disorder selected from the group consisting of migraine with aura, migraine without aura, iritis, uveitis, meningitis, depression, bipolar disorder, cluster headache or another trigeminal autonomic cephalalgia ("TAC") or blepharospasm, depression, agoraphobia, and bipolar disorder.

3. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen

binding fragment thereof comprises the heavy chain variable region polypeptide of SEQ ID NO: 1322.

4. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the heavy chain variable region polypeptide of SEQ ID NO: 1322.

5. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the heavy chain variable region polypeptide of SEQ ID NO: 1322.

6. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the light chain variable region polypeptide of SEQ ID NO: 1342.

7. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the light chain variable region polypeptide of SEQ ID NO: 1342.

8. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the light chain variable region polypeptide of SEQ ID NO: 1342.

9. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the heavy chain variable region polypeptide of SEQ ID NO: 1322 and the light chain variable region polypeptide of SEQ ID NO: 1342.

10. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the heavy chain variable region polypeptide of SEQ ID NO: 1322 and the light chain variable region polypeptide of SEQ ID NO: 1342.

11. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the heavy chain variable region polypeptide of SEQ ID NO: 1322 and the light chain variable region polypeptide of SEQ ID NO: 1342.

12. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises a heavy chain polypeptide having at least 90% identity to SEQ ID NO: 1321.

13. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises a heavy chain polypeptide having at least 90% identity to SEQ ID NO: 1321.
14. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises a heavy chain polypeptide having at least 90% identity to SEQ ID NO: 1321.
15. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises a light chain polypeptide having at least 90% identity to SEQ ID NO: 1341.
16. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises a light chain polypeptide having at least 90% identity to SEQ ID NO: 1341.
17. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises a light chain polypeptide having at least 90% identity to SEQ ID NO: 1341.
18. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises a heavy chain polypeptide having at least 90% identity to SEQ ID NO: 1321 and a light chain polypeptide having at least 90% identity to SEQ ID NO: 1341.
19. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises a heavy chain polypeptide having at least 90% identity to SEQ ID NO: 1321 and a light chain polypeptide having at least 90% identity to SEQ ID NO: 1341.
20. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises a heavy chain polypeptide having at least 90% identity to SEQ ID NO: 1321 and a light chain polypeptide having at least 90% identity to SEQ ID NO: 1341.
21. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the heavy chain polypeptide of SEQ ID NO: 1321.
22. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the heavy chain polypeptide of SEQ ID NO: 1321.

23. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the heavy chain polypeptide of SEQ ID NO: 1321.
24. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the light chain polypeptide of SEQ ID NO: 1341.
25. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the light chain polypeptide of SEQ ID NO: 1341.
26. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the light chain polypeptide of SEQ ID NO: 1341.
27. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the heavy chain polypeptide of SEQ ID NO: 1321 and the light chain polypeptide of SEQ ID NO: 1341.
28. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the heavy chain polypeptide of SEQ ID NO: 1321 and the light chain polypeptide of SEQ ID NO: 1341.
29. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof comprises the heavy chain polypeptide of SEQ ID NO: 1321 and the light chain polypeptide of SEQ ID NO: 1341.
30. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof is expressed from the heavy chain encoding polynucleotide of SEQ ID NO: 1331 and the light chain encoding polynucleotide of SEQ ID NO: 1351.
31. The use of claim 30, wherein said heavy chain encoding polynucleotide and said light chain encoding polynucleotide are expressed in a CHO cell.
32. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof is to be intravenously or subcutaneously administered.
33. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof is to be intravenously or subcutaneously administered.

34. The use of claim 1, wherein the humanized anti-PACAP antibody or antigen binding fragment thereof is to be intravenously or subcutaneously administered.

35. The use of claim 1, wherein the humanized anti-Pituitary Adenylate Cyclase-Activating Polypeptide ("PACAP") antibody or antigen binding fragment thereof comprises a heavy chain variable region polypeptide having at least 95% identity to SEQ ID NO: 1322 and a light chain variable region polypeptide having at least 95% identity to SEQ ID NO: 1342, wherein said heavy chain variable region comprises the heavy chain complementarity-determining region (CDR) 1 polypeptide of SEQ ID NO: 1324, the heavy chain CDR2 polypeptide of SEQ ID NO: 1326, and the heavy chain CDR3 polypeptide of SEQ ID NO: 1328, and said light chain variable region comprises the light chain CDR1 polypeptide of SEQ ID NO: 1344, the light chain CDR2 polypeptide of SEQ ID NO: 1346, and the light chain CDR3 polypeptide of SEQ ID NO: 1348.

36. The use of claim 1, wherein the humanized anti-Pituitary Adenylate Cyclase-Activating Polypeptide ("PACAP") antibody or antigen binding fragment thereof comprises a heavy chain variable region polypeptide having at least 95% identity to SEQ ID NO: 1322 and a light chain variable region polypeptide having at least 95% identity to SEQ ID NO: 1342,

wherein said heavy chain variable region comprises the heavy chain complementarity-determining region (CDR) 1 polypeptide of SEQ ID NO: 1324, the heavy chain CDR2 polypeptide of SEQ ID NO: 1326, and the heavy chain CDR3 polypeptide of SEQ ID NO: 1328, and said light chain variable region comprises the light chain CDR1 polypeptide of SEQ ID NO: 1344, the light chain CDR2 polypeptide of SEQ ID NO: 1346, and the light chain CDR3 polypeptide of SEQ ID NO: 1348.

37. The use of claim 1, wherein the humanized anti-Pituitary Adenylate Cyclase-Activating Polypeptide ("PACAP") antibody or antigen binding fragment thereof comprises a heavy chain variable region polypeptide having at least 95% identity to SEQ ID NO: 1322 and a light chain variable region polypeptide having at least 95% identity to SEQ ID NO: 1342, wherein said heavy chain variable region comprises the heavy chain complementarity-determining region (CDR) 1 polypeptide of SEQ ID NO: 1324, the heavy chain CDR2 polypeptide of SEQ ID NO: 1326, and the heavy chain CDR3 polypeptide of SEQ ID NO: 1328, and said light chain variable region comprises the light chain CDR1 polypeptide of SEQ ID NO: 1344, the light chain CDR2 polypeptide of SEQ ID NO: 1346, and the light chain CDR3 polypeptide of SEQ ID NO: 1348.