CLAIMS

1). Use of an effective amount of an anti-CGRP antibody or antibody fragment, anti-CGRP receptor antibody or fragment, or a polypeptide comprising a fragment of CGRP or a CGRP receptor, in the manufacture of a medicament to treat photophobia or light aversion or preclude the onset of photophobia or photoaversion in a subject, wherein the antibody or antibody fragment or fragment of CGRP or CGRP receptor reduces or prevents CGRP-associated photophobia or light aversion.

2). The use of claim 1 wherein the medicament comprises an anti-CGRP antibody or antibody fragment.

3). The use of claim 1 or 2 wherein the subject to be treated suffers from one or more of the following: chronic migraine, hemiplegic migraines, cluster headaches, migrainous neuralgia, chronic headaches, tension headaches, general headaches, hot flashes, chronic paroxysomal hemicrania, secondary headaches due to an underlying structural problem in the head or neck, cranial neuralgia, sinus headaches, allergy-induced headaches, menopausal migraine, menstrual migraine, or headache, headache-free migraine, abdominal migraine, or other migraine condition.

4). The use of claim 1 or 2 wherein the subject to be treated has a ocular disorder associated with photophobia selected from Achromatopsia, Aniridia, photophobia caused by an Anticholinergic drug, Aphakia (absence of the lens of the eye), Buphthalmos (abnormally narrow angle between the cornea and iris), Cataracts, Cone dystrophy, Congenital abnormalities of the eye, Viral conjunctivitis ("pink eye") Corneal abrasion, Corneal dystrophy, Corneal ulcer, disruption of the corneal epithelium, Ectopia lentis, Endophthalmitis, Eye trauma caused by disease, injury, or infection such as chalazion, episcleritis, glaucoma, keratoconus, or optic nerve hypoplasia, Hydrophthalmos, or congenital glaucoma Iritis, Optic neuritis, Pigment dispersion syndrom, Pupillary dilation

(naturally or chemically induced), Retinal detachment, Scarring of the cornea or sclera and Uveitis.

5). The use of claim 1 or 2 wherein the subject to be treated has a nervous-system-related or urological condition associated with photophobia selected from Autism spectrum disorders, Chiari malformation, Dyslexia, Encephalitis including Myalgic encephalomyelitis aka Chronic fatigue syndrome, Meningitis, Subarachnoid haemorrhage, Tumor of the posterior cranial fossa, Ankylosing spondylitis, Albinism, Ariboflavinosis, Benzodiazepines (long term use of or withdrawal from benzodiazepines), Chemotherapy, Chikungunya, Cystinosis, Ehlers-Danlos syndrome, Hangover, Influenza, Infectious Mononucleosis, Magnesium deficiency, Mercury poisoning, Migraine, Rabies, and Tyrosinemia type II, also known as "Richner-Hanhart syndrome".

6). The use of claim 1 or 2 wherein the subject to be treated has a photophobia associated disorder selected from the group consisting of migraine (with or without aura), iritis, uveitis, meningitis, depression, bipolar disorder, cluster headache or anther trigeminal autonomic cephalalgia or blepharospasm, depression, agoraphobia or bipolar disorder.

7). The use of claim 1 or 2 wherein the subject to be treated suffers from migraine headaches.

8). A method of assessing the potential in vivo efficacy of a candidate anti-CGRP antibody or antibody fragment, anti-CGRP receptor antibody or antibody fragment or a fragment of CGRP or CGRP receptor for treating a condition treatable by the administration of a CGRP antagonist associated with photophobia comprising performing an assay to determine whether the antibody or antibody fragment inhibits light aversive behavior in a nestin/Ramp1 rodent administered CGRP compared to a rodent administered CGRP in the absence of the candidate anti-CGRP antibody or antibody fragment.

9). The method of claim 8 wherein this assay is used to assess whether the antibody or antibody fragment may be used to treat a neurological condition characterized by increased CGRP levels.

10). The method of claim 8 wherein this assay is used to assess whether the anti-CGRP antibody or antibody fragment may be used to treat migraine, menstrual migraine, or chronic migraine.

11). The method of claim 8 wherein this assay is used to assess whether the anti-CGRP antibody or antibody fragment may be used to treat migraines (with or without aura), weight loss, cancer or tumors, angiogenesis associated with cancer or tumor growth, angiogenesis associated with cancer or tumor survival, hemiplagic migraines, cluster headaches, migrainous neuralgia, chronic headaches, tension headaches, general headaches, headache-free migraine, abdominal migraine, hot flashes, chronic paroxysomal hemicrania, secondary headaches due to an underlying structural problem in the head or neck, cranial neuralgia, sinus headaches, allergy-induced headaches or migraines, pain, inflammatory pain, post-operative incision pain, complex regional pain syndrome, cancer pain, primary or metastatic bone cancer pain, fracture pain, osteoporotic fracture pain, pain resulting from burn, osteoporosis, gout joint pain, pain associated with sickle cell crises, and other nociceptic pain, as well as hepatocellular carcinoma, breast cancer, liver cirrhosis, neurogenic pain, neuropathic pain, nociceptic pain, trigeminal neuralgia, post-herpetic neuralgia, phantom limb pain, fibromyalgia, menstrual pain, ovarialgia, reflex sympathetic dystrophy, neurogenic pain, osteoarthritis or rheumatoid arthritis pain, lower back pain, diabetic neuropathy, sciatica, or visceral pain associated with gastro-esophageal reflux, dyspepsia, irritable bowel syndrome, inflammatory bowel disease, Crohn's disease, ileitis, ulcerative colitis, renal colic, dysmenorrhea, cystitis, menstrual period, labor, menopause, prostatitis, or pancreatitis.

12). The use of any of claims 1-7 which includes another medicament containing an active agent used for treating migraine.

13). The use of any one of claims 1-7 wherein the anti-CGRP antibody or antibody fragment containing medicament is to be administered as a monotherapy.

14). The use of claim 12 wherein the antibody containing medicament is to be administered with another active agent in the same or different compositions.

15). The use of claim 14 wherein the subject is a migraine sufferer and the other active agent includes an analgesic, triptan, Topirimate, dihydroergotamine, or an opioid.

16). The use of any one of claims 1-7 wherein the antibody or antibody fragment is an anti-human CGRP antibody or antibody fragment which specifically binds to the same or overlapping linear or conformational epitope(s) and/or competes for binding to the same or overlapping linear or conformational epitope(s) on an intact CGRP polypeptide or fragment thereof as an anti-human CGRP antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

17). The use of any one of claims 1-7 wherein the antibody or antibody fragment specifically binds to the same or overlapping linear or conformational epitope(s) and/or competes for binding to the same or overlapping linear or conformational epitope(s) on an intact human CGRP polypeptide or a fragment thereof as Ab2, Ab3, Ab5, Ab6, Ab13 or Ab14.

18). The use of any one of claims 1-7 wherein the antibody or antibody fragment specifically binds to the same or overlapping linear or conformational epitope(s) and/or competes for binding to the same or overlapping linear or conformational epitope(s) on an intact human CGRP polypeptide or a fragment thereof as Ab2, Ab3, Ab5 or Ab6.

19). The use of any one of claims 1-7 wherein the antibody fragment is selected from a Fab fragment, a Fab' fragment, or a F(ab')2 fragment.

20). The use of claim 19, wherein said fragment is a Fab fragment.

21). The use of any one of claims 1-7 wherein the antibody or antibody fragment comprises a variable light chain comprising the CDR 1 sequence of SEQ ID NO:25, the CDR 2 sequence of SEQ ID NO:26, and the CDR 3 sequence of SEQ ID NO:27, and/or a variable heavy chain comprising the CDR 1 sequence of SEQ ID NO:28, the CDR 2 sequence of SEQ ID NO:29, and the CDR 3 sequence of SEQ ID NO:30.

22). The use of any one of claims 1-7 wherein the antibody or antibody fragment comprises a variable light chain comprising the CDR 1 sequence of SEQ ID NO:55, the CDR 2 sequence of SEQ ID NO:56, and the CDR 3 sequence of SEQ ID NO:57, and/or a variable heavy chain comprising the CDR 1 sequence of SEQ ID NO:58, the CDR 2 sequence of SEQ ID NO:59, and the CDR 3 sequence of SEQ ID NO:60.

23). The use of any one of claims 1-7 wherein the antibody or antibody fragment comprises at least 2 complementarity determining regions (CDRs) in each of the variable light and the variable heavy regions which are identical to those contained in an anti-human CGRP antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

24). The use of any one of claims 1-7 wherein the antibody or antibody fragment comprises at least 2 complementarity determining regions (CDRs) in each of the variable light and the variable heavy regions which are identical to those contained in Ab2, Ab3, Ab5, Ab6, Ab7, Ab8, Ab13 or Ab14.

25). The use of any one of claims 1-7 wherein the antibody or antibody fragment is entirely non-glycosylated or lacks N-glycosylation or contains only mannose residues.

26). The use of any one of claims 1-7 wherein the antibody or antibody fragment contains an Fc region that has been modified to alter effector function, half-life, proteolysis, and/or glycosylation.

27). The use of any one of claims 1-7 wherein the antibody or antibody fragment is a humanized, single chain or chimeric antibody.

28). The use of any one of claims 1-7 wherein the antibody or antibody fragment specifically binds to CGRP expressing human cells and/or to circulating soluble CGRP molecules *in vivo*.

29). The use of any one of claims 1-7 wherein the antibody or antibody fragment comprises a V_H polypeptide sequence selected from: SEQ ID NO: 3, 13, 23, 33, 43, 53, 63,

73, 83, 93, 103, 113, 123, or 133, or a variant thereof; and further comprising a V_L polypeptide sequence selected from: SEQ ID NO: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121 or 131, or a variant thereof which possesses at least 90% sequence identity therewith, wherein one or more of the framework (FR) or CDR residues in said V_H or V_L polypeptide has been substituted with another amino acid residue resulting in an anti-CGRP antibody that specifically binds CGRP.

30). The use of claim 29 wherein one or more of said FR residues are substituted with an amino acid present at the corresponding site in a parent rabbit anti-CGRP antibody from which the complementarity determining regions (CDRs) contained in said V_H or V_L polypeptides have been derived or by a conservative amino acid substitution.

31). The use of claim 30, wherein said antibody or antibody fragment is humanized.

32). The use of claim 30, wherein said antibody or antibody fragment is chimeric.

33). The use of claim 30, wherein said antibody comprises a single chain antibody.

34). The use of claim 32, wherein said chimeric antibody comprises a human F_c.

35). The use of claim 34, wherein said human F_c is derived from IgG1, IgG2, IgG3, or IgG4.

36). The use of any one of claims 1-7 wherein the antibody or antibody fragment inhibits the association of CGRP with CGRP-R and/or multimers thereof, one or more additional proteins in a CGRP-CGRP-R complex, and/or antagonizes the biological effects thereof.

37). The use of claim 29 wherein the antibody or antibody fragment comprises a polypeptide sequence having at least 90% or greater homology to two of the polypeptide sequences recited therein.

38). The use of claim 29 wherein the antibody or antibody fragment comprises a polypeptide sequence having at least 95% or greater homology to any one of the polypeptide sequences recited therein.

39). The use of claim 29 wherein the antibody or antibody fragment binds to CGRP with an off-rate (K_{off}) of less than or equal to 10^{-4} S^{-1}, $5x10^{-5}$ S^{-1}, 10^{-5} S^{-1}, $5x10^{-6}$ S^{-1}, 10^{-6} S^{-1}, $5x10^{-7}$ S^{-1}, or 10^{-7} S^{-1}.

40). The use of claim 29 wherein the antibody or antibody fragment inhibits the production of CGRP with CGRP-R and/or multimers thereof, and/or the production of CGRP with CGRP-R and one or more additional proteins in a complex.

41). The use of any one of claims 1-7 wherein the anti-CGRP antibody binds to the same or overlapping CGRP epitope as an anti-CGRP antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

42). The use of any one of claims 1-7 wherein the anti-CGRP antibody or fragment comprises one or more of the CDRs contained in the V_H polypeptide sequences selected from: SEQ ID NO: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113, 123, or 133 and/or one or more of the CDRs contained in the V_L polypeptide sequences selected from: SEQ ID NO: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121 or 131.

43). The use of any one of claims 1-7 wherein the anti-CGRP antibody or fragment comprises at least 2 of the CDRs contained in the V_H polypeptide sequences selected from: SEQ ID NO: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113, 123, or 133 and/orat least 2 of the CDRs contained in the V_L polypeptide sequences selected from: SEQ ID NO: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121 or 131.

44). The use of any one of claims 1-7 wherein the anti-CGRP antibody or fragment comprises all 3 of the CDRs contained in the V_H polypeptide sequences selected from: SEQ ID NO: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113, 123, or 133 and/or all 3 of the CDRs contained in the V_L polypeptide sequences selected from: SEQ ID NO: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121 or 131.

45). The use of any one of claims 1-7 wherein the antibody or antibody fragment containing medicament is to be administered intramuscularly, subcutaneously, intravenously, rectally, by infusion, orally, transdermally or via inhalation.

46). The use of any one of claims 1-7 wherein the antibody or antibody fragment containing medicament is to be administered intravenously.

47). The use of any one of claims 1-7 that includes another medicament in the form of another therapeutic agent or regimen selected from anti-histamines, anti-inflammatory agents, or antibiotics.

48). The use of any one of claims 1-7 wherein the anti-CGRP antibody or antibody fragment having binding specificity for CGRP comprises variable light chain CDR1, CDR2, and CDR3 polypeptide sequences and variable heavy chain CDR1, CDR2, and CDR3 polypeptide sequences selected from the following:

	V_L CDR1	V_L CDR2	V_L CDR3	V_H CDR1	V_H CDR2	V_H CDR3
A	Seq ID No: 5	Seq ID No: 6	Seq ID No: 7	Seq ID No: 8	Seq ID No: 9	Seq ID No: 10
B	Seq ID No: 15	Seq ID No: 16	Seq ID No: 17	Seq ID No: 18	Seq ID No: 19	Seq ID No: 20
C	Seq ID No: 25	Seq ID No: 26	Seq ID No: 27	Seq ID No: 28	Seq ID No: 29	Seq ID No: 30
D	Seq ID No: 35	Seq ID No: 36	Seq ID No: 37	Seq ID No: 38	Seq ID No: 39	Seq ID No: 40
E	Seq ID No: 45	Seq ID No: 46	Seq ID No: 47	Seq ID No: 48	Seq ID No: 49	Seq ID No: 50
F	Seq ID No: 55	Seq ID No: 56	Seq ID No: 57	Seq ID No: 58	Seq ID No: 59	Seq ID No: 60
G	Seq ID No: 65	Seq ID No: 66	Seq ID No: 67	Seq ID No: 68	Seq ID No: 69	Seq ID No: 70
H	Seq ID No: 75	Seq ID No: 76	Seq ID No: 77	Seq ID No: 78	Seq ID No: 79	Seq ID No: 80
I	Seq ID No: 85	Seq ID No: 86	Seq ID No: 87	Seq ID No: 88	Seq ID No: 89	Seq ID No: 90
J	Seq ID No: 95	Seq ID No: 96	Seq ID No: 97	Seq ID No: 98	Seq ID No: 99	Seq ID No: 100
K	Seq ID No: 105	Seq ID No: 106	Seq ID No: 107	Seq ID No: 108	Seq ID No: 109	Seq ID No: 110
L	Seq ID No: 115	Seq ID No: 116	Seq ID No: 117	Seq ID No: 118	Seq ID No: 119	Seq ID No: 120
M	Seq ID No: 125	Seq ID No: 126	Seq ID No: 127	Seq ID No: 128	Seq ID No: 129	Seq ID No: 130

N	Seq ID No: 135	Seq ID No: 136	Seq ID No:137	Seq ID No: 138	Seq ID No: 139	Seq ID No: 140

49). The use of claim 48, wherein said antibody fragment is an scFv, camelbody, nanobody, IgNAR (single-chain antibodies derived from sharks), Fab, Fab', or F(ab')2 fragment.

50). The use of claim 48, wherein said anti-CGRP antibody fragment is a Fab fragment.

51). The use of claim 48, wherein said antibody or fragment comprises a variable light chain polypeptide sequence and a variable heavy chain polypeptide sequence selected from the following:

	Variable Light Chain	Variable Heavy Chain
A	Seq ID No: 1	Seq ID No: 3
B	Seq ID No: 11	Seq ID No: 13
C	Seq ID No: 21	Seq ID No: 23
D	Seq ID No: 31	Seq ID No: 33
E	Seq ID No: 41	Seq ID No: 43
F	Seq ID No: 51	Seq ID No: 53
G	Seq ID No: 61	Seq ID No: 63
H	Seq ID No: 71	Seq ID No: 73
I	Seq ID No: 81	Seq ID No: 83
J	Seq ID No: 91	Seq ID No: 93
K	Seq ID No: 101	Seq ID No: 103
L	Seq ID No: 111	Seq ID No: 113
M	Seq ID No: 121	Seq ID No: 123
N	Seq ID No: 131	Seq ID No: 133

52). The use of claim 48, wherein said antibody or fragment comprises a light chain polypeptide sequence and a heavy chain polypeptide sequence selected from the following:

	Light Chain	Heavy Chain
Ab1	Seq ID No: 2	Seq ID No: 4
Ab2	Seq ID No: 12	Seq ID No: 14
Ab3	Seq ID No: 22	Seq ID No: 24
Ab4	Seq ID No: 32	Seq ID No: 34

Ab5	Seq ID No: 42	Seq ID No: 44
Ab6	Seq ID No: 52	Seq ID No: 54
Ab7	Seq ID No: 62	Seq ID No: 64
Ab8	Seq ID No: 72	Seq ID No: 74
Ab9	Seq ID No: 82	Seq ID No: 84
Ab10	Seq ID No: 92	Seq ID No: 94
Ab11	Seq ID No: 102	Seq ID No: 104
Ab12	Seq ID No: 112	Seq ID No: 114
Ab13	Seq ID No: 122	Seq ID No: 124
Ab14	Seq ID No: 132	Seq ID No: 134

53). The use of claim 48, wherein said antibody or fragment comprises a variable light chain and variable heavy chain polypeptide sequences are each at least 90% identical to one of the variable light chain polypeptide sequences of SEQ ID NOS: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121, or 131, and at least 90% identical to one of the variable heavy chain polypeptide sequences of SEQ ID NOS: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113, 123 or 133, respectively.

54). The use of claim 48, wherein said antibody or fragment comprises a variable light chain and variable heavy chain polypeptide sequences are each at least 95% identical to one of the variable light chain polypeptide sequences of SEQ ID NOS: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121, or 131, and at least 95% identical to one of the variable heavy chain polypeptide sequences of SEQ ID NOS: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113, 123 or 133, respectively.

55). The use of claim 48, wherein said antibody or fragment is chimeric or humanized.

56). The use of claim 48, wherein said anti-CGRP antibody or antibody fragment is entirely non-glycosylated or lacks N-glycosylation or comprises only mannose residues.

57). The use of claim 48, wherein said anti-CGRP antibody or antibody fragment comprises a human constant domain.

58). The use of claim 48, wherein said anti-CGRP antibody or antibody fragment is an IgG1, IgG2, IgG3 or IgG4 antibody.

59). The use of claim 48, wherein said anti-CGRP antibody or antibody fragment contains an Fc region that has been modified to alter at least one of effector function, half-life, proteolysis, and/or glycosylation.

60). The use of claim 48, wherein said anti-CGRP antibody or antibody fragment has an Fc region that contains a mutation that alters or eliminates all glycosylation or reduces or eliminates N-glycosylation.

61). The use of claim 48, wherein said anti-CGRP antibody or antibody fragment is directly or indirectly attached to a detectable label or therapeutic agent.

62). The use of claim 48, wherein said anti-CGRP antibody or antibody fragment further comprises an effector moiety.

63). The use of claim 62, wherein said effector moiety is a detectable moiety or a functional moiety.

64). The use of claim 63, wherein said detectable moiety is a fluorescent dye, an enzyme, a substrate, a bioluminescent material, a radioactive material, or a chemiluminescent material.

65). The use of claim 63, wherein said functional moiety is streptavidin, avidin, biotin, a cytotoxin, a cytotoxic agent, or a radioactive material.

66). The use of any of the foregoing claims, which includes another medicament in the form of at least one of a beta-blocker, flunarizine, valproic acid, topiramate, amitriptyline, venlafaxine, gabapentin, naproxen, butterbur root, vitamin B2 and magnesium.

67). The use of any of the foregoing claims, which includes another medicament in the form of at least one other active selected from analgesics, anti-histamines, antipyretics, anti-inflammatories, antibiotics, antivirals, and anti-cytokine agents.

68). The use of claim 67, wherein other active is selected agonists, antagonists, and modulators of TNF-α, IL-2, IL-4, IL-6, IL-10, IL-12, IL-13, IL-18, IFN-α, IFN-γ, BAFF,

CXCL13, IP-10, VEGF, EPO, EGF, HRG, Hepatocyte Growth Factor (HGF), Hepcidin, including antibodies reactive against any of the foregoing, and antibodies reactive against any of their receptors.

69). The use of any of the foregoing claims that includes another medicament in the form of an active agent including but not limited to 2-Arylpropionic acids, Aceclofenac, Acemetacin, Acetylsalicylic acid (Aspirin), Alclofenac, Alminoprofen, Amoxiprin, Ampyrone, Arylalkanoic acids, Azapropazone, Benorylate/Benorilate, Benoxaprofen, Bromfenac, Carprofen, Celecoxib, Choline magnesium salicylate, Clofezone, COX-2 inhibitors, Dexibuprofen, Dexketoprofen, Diclofenac, Diflunisal, Droxicam, Ethenzamide, Etodolac, Etoricoxib, Faislamine, fenamic acids, Fenbufen, Fenoprofen, Flufenamic acid, Flunoxaprofen, Flurbiprofen, Ibuprofen, Ibuproxam, Indometacin, Indoprofen, Kebuzone, Ketoprofen, Ketorolac, Lornoxicam, Loxoprofen, Lumiracoxib, Magnesium salicylate, Meclofenamic acid, Mefenamic acid, Meloxicam, Metamizole, Methyl salicylate, Mofebutazone, Nabumetone, Naproxen, N-Arylanthranilic acids, Nerve Growth Factor (NGF), Oxametacin, Oxaprozin, Oxicams, Oxyphenbutazone, Parecoxib, Phenazone, Phenylbutazone, Phenylbutazone, Piroxicam, Pirprofen, profens, Proglumetacin, Pyrazolidine derivatives, Rofecoxib, Salicyl salicylate, Salicylamide, Salicylates, Substance P, Sulfinpyrazone, Sulindac, Suprofen, Tenoxicam, Tiaprofenic acid, Tolfenamic acid, Tolmetin, and Valdecoxib.

70). The use of any of the foregoing claims that includes another medicament in the form of an anti- histamine active agent including but not limited to acrivastine, astemizole, azatadine, azelastine, betatastine, brompheniramine, buclizine, cetirizine, cetirizine analogues, chlorpheniramine, clemastine, CS 560, cyproheptadine, desloratadine, dexchlorpheniramine, ebastine, epinastine, fexofenadine, HSR 609, hydroxyzine, levocabastine, loratidine, methscopolamine, mizolastine, norastemizole, phenindamine, promethazine, pyrilamine, terfenadine, and tranilast.

71). The use of any of the foregoing claims that includes another medicament in the form of an antibiotic active agents including but not limited to Amikacin, Aminoglycosides, Amoxicillin, Ampicillin, Ansamycins, Arsphenamine, Azithromycin,

Azlocillin, Aztreonam, Bacitracin, Carbacephem, Carbapenems, Carbenicillin, Cefaclor, Cefadroxil, Cefalexin, Cefalothin, Cefalotin, Cefamandole, Cefazolin, Cefdinir, Cefditoren, Cefepime, Cefixime, Cefoperazone, Cefotaxime, Cefoxitin, Cefpodoxime, Cefprozil, Ceftazidime, Ceftibuten, Ceftizoxime, Ceftobiprole, Ceftriaxone, Cefuroxime, Cephalosporins, Chloramphenicol, Cilastatin, Ciprofloxacin, Clarithromycin, Clindamycin, Cloxacillin, Colistin, Co-trimoxazole, Dalfopristin, Demeclocycline, Dicloxacillin, Dirithromycin, Doripenem, Doxycycline, Enoxacin, Ertapenem, Erythromycin, Ethambutol, Flucloxacillin, Fosfomycin, Furazolidone, Fusidic acid, Gatifloxacin, Geldanamycin, Gentamicin, Glycopeptides, Herbimycin, Imipenem, Isoniazid, Kanamycin, Levofloxacin, Lincomycin, Linezolid, Lomefloxacin, Loracarbef, Macrolides, Mafenide, Meropenem, Meticillin, Metronidazole, Mezlocillin, Minocycline, Monobactams, Moxifloxacin, Mupirocin, Nafcillin, Neomycin, Netilmicin, Nitrofurantoin, Norfloxacin, Ofloxacin, Oxacillin, Oxytetracycline, Paromomycin, Penicillin, Penicillins, Piperacillin, Platensimycin, Polymyxin B, Polypeptides, Prontosil, Pyrazinamide, Quinolones, Quinupristin, Rifampicin, Rifampin, Roxithromycin, Spectinomycin, Streptomycin, Sulfacetamide, Sulfamethizole, Sulfanilimide, Sulfasalazine, Sulfisoxazole, Sulfonamides, Teicoplanin, Telithromycin, Tetracycline, Tetracyclines, Ticarcillin, Tinidazole, Tobramycin, Trimethoprim, Trimethoprim-Sulfamethoxazole, Troleandomycin, Trovafloxacin, and Vancomycin.

72). The use of any of the foregoing claims that includes another medicament in the form of an active agent including but not limited to Aldosterone, Beclometasone, Betamethasone, Corticosteroids, Cortisol, Cortisone acetate, Deoxycorticosterone acetate, Dexamethasone, Fludrocortisone acetate, Glucocorticoids, Hydrocortisone, Methylprednisolone, Prednisolone, Prednisone, Steroids, and Triamcinolone and combinations thereof.

73). The use of any of the foregoing claims that includes another medicament in the form of an active agent including but not limited Ibuprofen, naproxen, sumatriptan, Paracetamol/acetaminophen, caffeine, a Triptan such as Ergotamines such as Ergotamine, a

corticosteroid, an anti-mimetic including but not limited to metoclopramide and combinations thereof.

74). The use of any of the foregoing claims that includes another medicament in the form of an active agent combination including but not limited to aspirin with metoclopramide), (paracetamol/codeine for analgesia, with buclizine as the antiemetic) and paracetamol/metoclopramide.

CLAIMS

1). Use of an effective amount of an anti-CGRP antibody or antibody fragment, in the manufacture of a medicament to treat photophobia or light aversion or preclude the onset of photophobia or photoaversion in a subject, wherein said anti-CGRP antibody or fragment which reduces or prevents CGRP-associated photophobia or light aversion is selected from one comprising

(i) the VL CDRs of SEQ ID NO: SEQ ID NO: 5; SEQ ID NO: 6; and SEQ ID NO: 7 and the VH CDRs of SEQ ID NO: 8; SEQ ID NO: 9; and SEQ ID NO: 10; **Ab1**
(ii) the VL CDRs of SEQ ID NO: 15; SEQ ID NO: 16; and SEQ ID NO: 17 and the VH CDRs of SEQ ID NO: 18; SEQ ID NO: 19; and SEQ ID NO: 20; **Ab2**
(iii) the VL CDRs of SEQ ID NO: SEQ ID NO: 25; SEQ ID NO: 26; and SEQ ID NO: 27 and the VH CDRs of SEQ ID NO:2 8; SEQ ID NO: 29; and SEQ ID NO: 30; **Ab3**
(iv) the VL CDRs of SEQ ID NO: SEQ ID NO: 35; SEQ ID NO: 36; and SEQ ID NO: 7 and the VH CDRs of SEQ ID NO: 38; SEQ ID NO: 39; and SEQ ID NO: 40; **Ab4**
(v) the VL CDRs of SEQ ID NO: SEQ ID NO: 45; SEQ ID NO: 46; and SEQ ID NO: 37 and the VH CDRs of SEQ ID NO: 48; SEQ ID NO: 49; and SEQ ID NO: 50; **Ab5**
(v) the VL CDRs of SEQ ID NO: SEQ ID NO: 55; SEQ ID NO: 56; and SEQ ID NO: 57 and the VH CDRs of SEQ ID NO:58; SEQ ID NO: 59; and SEQ ID NO: 60; **Ab6**
(vii) the VL CDRs of SEQ ID NO: SEQ ID NO: 65; SEQ ID NO: 66; and SEQ ID NO: 67 and the VH CDRs of SEQ ID NO: 68; SEQ ID NO: 69; and SEQ ID NO: 70; **Ab7**
(viii) the VL CDRs of SEQ ID NO: SEQ ID NO: 75; SEQ ID NO: 76; and SEQ ID NO:7 7 and the VH CDRs of SEQ ID NO: 78; SEQ ID NO: 79; and SEQ ID NO: 80; **Ab8**
(ix) the VL CDRs of SEQ ID NO: SEQ ID NO: 85; SEQ ID NO:86; and SEQ ID NO: 87 and the VH CDRs of SEQ ID NO: 88; SEQ ID NO:89; and SEQ ID NO: 90; **Ab9**
(x) the VL CDRs of SEQ ID NO: 95; SEQ ID NO: 96; and SEQ ID NO: 97 and the VH CDRs of SEQ ID NO: 98; SEQ ID NO: 99; and SEQ ID NO: 100; **Ab10**
(xi) the VL CDRs of SEQ ID NO: SEQ ID NO: 105; SEQ ID NO: 106; and SEQ ID NO:107 and the VH CDRs of SEQ ID NO: 108; SEQ ID NO: 109; and SEQ ID NO: 110; **Ab11**
(xii) the VL CDRs of SEQ ID NO: SEQ ID NO: 115; SEQ ID NO: 116; and SEQ ID NO: 117 and the VH CDRs of SEQ ID NO: 118; SEQ ID NO:119; and SEQ ID NO: 120; **Ab12**
(xiii) the VL CDRs of SEQ ID NO: SEQ ID NO:125; SEQ ID NO: 126; and SEQ ID NO: 127 and the VH CDRs of SEQ ID NO: 128; SEQ ID NO: 129; and SEQ ID NO: 130; **Ab13** and

(xiv) the VL CDRs of SEQ ID NO: SEQ ID NO: 145; SEQ ID NO: 146; and SEQ ID NO: 147 and the VH CDRs of SEQ ID NO:148; SEQ ID NO:149; and SEQ ID NO: 150. **Ab14**.

2). The use of claim 1 wherein the medicament comprises an intact anti-CGRP antibody.

3). The use of claim 1 or 2 wherein the subject to be treated suffers from one or more of the following: chronic migraine, hemiplegic migraines, cluster headaches, migrainous neuralgia, chronic headaches, tension headaches, general headaches, hot flashes, chronic paroxysomal hemicrania, secondary headaches due to an underlying structural problem in the head or neck, cranial neuralgia, sinus headaches, allergy-induced headaches, menopausal migraine, menstrual migraine, or headache, headache-free migraine, abdominal migraine, or other migraine condition.

4). The use of claim 1 or 2 wherein the subject to be treated has a ocular disorder associated with photophobia selected from Achromatopsia, Aniridia, photophobia caused by an Anticholinergic drug, Aphakia (absence of the lens of the eye), Buphthalmos (abnormally narrow angle between the cornea and iris), Cataracts, Cone dystrophy, Congenital abnormalities of the eye, Viral conjunctivitis ("pink eye") Corneal abrasion, Corneal dystrophy, Corneal ulcer, disruption of the corneal epithelium, Ectopia lentis, Endophthalmitis, Eye trauma caused by disease, injury, or infection such as chalazion, episcleritis, glaucoma, keratoconus, or optic nerve hypoplasia, Hydrophthalmos, or congenital glaucoma Iritis, Optic neuritis, Pigment dispersion syndrom, Pupillary dilation (naturally or chemically induced), Retinal detachment, Scarring of the cornea or sclera and Uveitis.

5). The use of claim 1 or 2 wherein the subject to be treated has a nervous-system-related or urological condition associated with photophobia selected from Autism spectrum disorders, Chiari malformation, Dyslexia, Encephalitis including Myalgic encephalomyelitis aka Chronic fatigue syndrome, Meningitis, Subarachnoid haemorrhage, Tumor of the posterior cranial fossa, Ankylosing spondylitis, Albinism, Ariboflavinosis, Benzodiazepines (long term use of or withdrawal from benzodiazepines), Chemotherapy, Chikungunya, Cystinosis, Ehlers-Danlos syndrome, Hangover, Influenza, Infectious Mononucleosis, Magnesium deficiency, Mercury poisoning, Migraine, Rabies, and Tyrosinemia type II, also known as "Richner-Hanhart syndrome".

6). The use of claim 1 or 2 wherein the subject to be treated has a photophobia associated disorder selected from the group consisting of migraine (with or without aura), iritis, uveitis, meningitis,

depression, bipolar disorder, cluster headache or anther trigeminal autonomic cephalalgia or blepharospasm, depression, agoraphobia or bipolar disorder.

7). The use of claim 1 or 2 wherein the subject to be treated suffers from migraine headaches.

8). The use of any of claims 1-7 which includes another medicament containing an active agent used for treating migraine.

9). The use of any one of claims 1-7 wherein the anti-CGRP antibody or antibody fragment containing medicament is to be administered as a monotherapy.

10). The use of claim 8 wherein the antibody containing medicament is to be administered with another active agent in the same or different compositions.

11). The use of claim 10 wherein the subject is a migraine sufferer and the other active agent includes an analgesic, triptan, Topirimate, dihydroergotamine, or an opioid.

12). The use of any one of claims 1-7 wherein the antibody fragment is selected from a Fab fragment, a Fab' fragment, or a F(ab')2 fragment.

13). The use of claim 12, wherein said fragment is a Fab fragment.

14). The use of any one of claims 1-7 wherein the antibody or antibody fragment comprises a variable light chain comprising the CDR 1 sequence of SEQ ID NO:25, the CDR 2 sequence of SEQ ID NO:26, and the CDR 3 sequence of SEQ ID NO:27, and/or a variable heavy chain comprising the CDR 1 sequence of SEQ ID NO:28, the CDR 2 sequence of SEQ ID NO:29, and the CDR 3 sequence of SEQ ID NO:30.

15). The use of any one of claims 1-7 wherein the antibody or antibody fragment comprises a variable light chain comprising the CDR 1 sequence of SEQ ID NO:55, the CDR 2 sequence of SEQ ID NO:56, and the CDR 3 sequence of SEQ ID NO:57, and/or a variable heavy chain comprising the CDR 1 sequence of SEQ ID NO:58, the CDR 2 sequence of SEQ ID NO:59, and the CDR 3 sequence of SEQ ID NO:60.

16). The use of any one of claims 1-7 wherein the antibody or antibody fragment is entirely non-glycosylated or lacks N-glycosylation or contains only mannose residues.

17). The use of any one of claims 1-7 wherein the antibody or antibody fragment contains an Fc region that has been modified to alter effector function, half-life, proteolysis, and/or glycosylation.

18). The use of any one of claims 1-7 wherein the antibody or antibody fragment is a humanized, single chain or chimeric antibody.

19). The use of any one of claims 1-7 wherein the antibody or antibody fragment specifically binds to CGRP expressing human cells and/or to circulating soluble CGRP molecules *in vivo*.

20). The use of any one of claims 1-7 wherein the antibody or antibody fragment is selected from the following:

(i) one comprising a V_H polypeptide sequence: of SEQ ID NO: 3, and a V_L polypeptide sequence of SEQ ID NO:1; **Ab1**

(ii) one comprising a V_H polypeptide sequence: of SEQ ID NO: 13, and a V_L polypeptide sequence of SEQ ID NO:11; **Ab2**

(iii) one comprising a V_H polypeptide sequence: of SEQ ID NO: 23, and a V_L polypeptide sequence of SEQ ID NO:21; **Ab3**

(iv) one comprising a V_H polypeptide sequence: of SEQ ID NO: 33, and a V_L polypeptide sequence of SEQ ID NO:31; **Ab4**

(v) one comprising a V_H polypeptide sequence: of SEQ ID NO: 43, and a V_L polypeptide sequence of SEQ ID NO:41; **Ab5**

(vi) one comprising a V_H polypeptide sequence: of SEQ ID NO: 53, and a V_L polypeptide sequence of SEQ ID NO:51; **Ab6**

(vii) one comprising a V_H polypeptide sequence: of SEQ ID NO: 63, and a V_L polypeptide sequence of SEQ ID NO:61; **Ab7**

(viii) one comprising a V_H polypeptide sequence: of SEQ ID NO: 73, and a V_L polypeptide sequence of SEQ ID NO:71; **Ab8**

(ix) one comprising a V_H polypeptide sequence: of SEQ ID NO: 83, and a V_L polypeptide sequence of SEQ ID NO:81; **Ab9**

(x) one comprising a V_H polypeptide sequence: of SEQ ID NO: 93, and a V_L polypeptide sequence of SEQ ID NO:91; **Ab10**

(xi) one comprising a V_H polypeptide sequence: of SEQ ID NO: 103, and a V_L polypeptide sequence of SEQ ID NO:101; **Ab11**

(xii) one comprising a V_H polypeptide sequence: of SEQ ID NO: 113, and a V_L polypeptide sequence of SEQ ID NO:111; **Ab12**

(xiii) one comprising a V_H polypeptide sequence: of SEQ ID NO: 123, and a V_L polypeptide sequence of SEQ ID NO:121; and **Ab13**

(xiv) one comprising a V_H polypeptide sequence: of SEQ ID NO: 133, and a V_L polypeptide sequence of SEQ ID NO:131. **Ab14**.

21). The use of claim 1, wherein said antibody or antibody fragment is humanized.

22). The use of claim 1, wherein said antibody or antibody fragment is chimeric.

23). The use of claim 1, wherein said antibody comprises a single chain antibody.

24). The use of claim 22, wherein said chimeric antibody comprises a human F_c.

25). The use of claim 24, wherein said human F_c is derived from IgG1, IgG2, IgG3, or IgG4.

26). The use of claim 1 wherein the antibody or antibody fragment binds to CGRP with an off-rate (K_{off}) of less than or equal to 10^{-4} S^{-1}, $5x10^{-5}$ S^{-1}, 10^{-5} S^{-1}, $5x10^{-6}$ S^{-1}, 10^{-6} S^{-1}, $5x10^{-7}$ S^{-1}, or 10^{-7} S^{-1}.

27). The use of any one of claims 1-7 wherein the antibody or antibody fragment containing medicament is to be administered intramuscularly, subcutaneously, intravenously, rectally, by infusion, orally, transdermally or via inhalation.

28). The use of any one of claims 1-7 wherein the antibody or antibody fragment containing medicament is to be administered intravenously.

29). The use of any one of claims 1-7 that includes another medicament in the form of another anti-inflammatory agent.

30). The use of claim 1, wherein said antibody fragment is an scFv, camelbody, nanobody, IgNAR (single-chain antibodies derived from sharks), Fab, Fab', or F(ab')2 fragment.

31). The use of claim 1, wherein said anti-CGRP antibody fragment is a Fab fragment.

32). The use of claim 1, wherein said antibody or fragment is chimeric or humanized.

33). The use of claim 1, wherein said anti-CGRP antibody or antibody fragment is entirely non-glycosylated or lacks N-glycosylation or comprises only mannose residues.

34). The use of claim 1, wherein said anti-CGRP antibody or antibody fragment comprises a human constant domain.

35). The use of claim 1, wherein said anti-CGRP antibody or antibody fragment is an IgG1, IgG2, IgG3 or IgG4 antibody.

36). The use of claim 1, wherein said anti-CGRP antibody or antibody fragment contains an Fc region that has been modified to alter at least one of effector function, half-life, proteolysis, and/or glycosylation.

37). The use of claim 1, wherein said anti-CGRP antibody or antibody fragment has an Fc region that contains a mutation that alters or eliminates all glycosylation or reduces or eliminates N-glycosylation.

38). The use of claim 1, wherein said anti-CGRP antibody or antibody fragment is directly or indirectly attached to a detectable label or therapeutic agent.

39). The use of claim 1, wherein said anti-CGRP antibody or antibody fragment further comprises an effector moiety.

40). The use of claim 39, wherein said effector moiety is a detectable moiety or a functional moiety.

41). The use of claim 40, wherein said detectable moiety is a fluorescent dye, an enzyme, a substrate, a bioluminescent material, a radioactive material, or a chemiluminescent material.

42). The use of claim 40, wherein said functional moiety is streptavidin, avidin, biotin, a cytotoxin, a cytotoxic agent, or a radioactive material.

43). The use of any of the foregoing claims, which includes another medicament in the form of at least one other analgesic.