What is claimed is:

1.) An isolated 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 Ab6, Ab1, Ab2, Ab3, Ab4, Ab5, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

2.) The isolated anti-human CGRP antibody or antibody fragment according to claim 1, wherein said anti-human CGRP antibody or antibody fragment comprises:

(i) a V_H polypeptide having the amino acid sequence set forth in SEQ ID NO: 53, 3, 13, 23, 33, 43, 63, 73, 83, 93, 103, 113, 123, or 133, or a variant thereof that exhibits at least 90%, at least 95%, at least 98% or at least 99% sequence identity therewith; and/or

(ii) a V_L polypeptide having the amino acid sequence set forth in SEQ ID NO: 51, 1, 11, 21, 31, 41, 61, 71, 81, 91, 101, 111, 121 or 131, or a variant thereof that exhibits at least 90%, at least 95%, at least 98% or at least 99% sequence identity therewith,

wherein one or more of said FR residues are optionally 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, preferably at most 1 or 2 of the residues in the CDRs of said V_L polypeptide sequence and/or at most 1 or 2 of the residues in the CDRs of said V_H polypeptide sequence are modified.

3.) The isolated anti-human CGRP antibody or antibody fragment according to claim 1 or claim 2, which comprises

(i) a variable light chain comprising the CDR1 sequence of SEQ ID NO:55, the CDR2 sequence of SEQ ID NO:56, and the CDR3 sequence of SEQ ID NO:57;

(ii) a variable heavy chain comprising the CDR1 sequence of SEQ ID NO:58, the CDR2 sequence of SEQ ID NO:59, and the CDR3 sequence of SEQ ID NO:60;

(iii) at least 1 complementarity determining regions (CDRs) in each of the variable light and the variable heavy regions which are identical to the CDRs contained in an anti-human CGRP antibody selected from Ab6, Ab1, Ab2, Ab3, Ab4, Ab5, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14;

(iv) at least 2 complementarity determining regions (CDRs) in each of the variable light and the variable heavy regions which are identical to the CDRs contained in an anti-human CGRP antibody selected from Ab6, Ab1, Ab2, Ab3, Ab4, Ab5, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14;

(v) all 3 complementarity determining regions (CDRs) in each of the variable light and the variable heavy regions as an anti-human CGRP antibody selected from Ab6, Ab1, Ab2, Ab3, Ab4, Ab5, Ab7, Ab8, Ab9, Ab10, Ab11, A12, Ab13 or Ab14;

(vi) a variable light chain comprising the CDR1 sequence of SEQ ID NO:25, the CDR2 sequence of SEQ ID NO:26, and the CDR3 sequence of SEQ ID NO:27, and/or a variable heavy chain comprising the CDR1 sequence of SEQ ID NO:28, the CDR2 sequence of SEQ ID NO:29, and the CDR3 sequence of SEQ ID NO:30;

(vii) one or more of the CDRs contained in the V_H polypeptide having the amino acid sequence set forth in SEQ ID NO: 53, 3, 13, 23, 33, 43, 63, 73, 83, 93, 103, 113, 123, or 133 and/or one or more of the CDRs contained in the V_L polypeptide having the amino acid sequence set forth in SEQ ID NO: 51, 1, 11, 21, 31, 41, 61, 71, 81, 91, 101, 111, 121 or 131;

(viii) at least 2 of the CDRs contained in a V_H polypeptide having an amino acid sequence set forth in SEQ ID NO: 53, 3, 13, 23, 33, 43, 63, 73, 83, 93, 103, 113, 123, or 133 and/or at least 2 of the CDRs contained in the V_L polypeptide having the amino acid sequence set forth in SEQ ID NO: 51, 1, 11, 21, 31, 41, 61, 71, 81, 91, 101, 111, 121 or 131; or

(ix) all 3 of the CDRs contained in the V_H polypeptide having the amino acid sequence set forth in SEQ ID NO: 53, 3, 13, 23, 33, 43, 63, 73, 83, 93, 103, 113, 123, or 133 and/or all 3 of the CDRs contained in the V_L polypeptide having the amino acid sequence set forth in SEQ ID NO: 51, 1, 11, 21, 31, 41, 61, 71, 81, 91, 101, 111, 121 or 131.

4.) The isolated anti-human CGRP antibody or antibody fragment according to claim 1, wherein said anti-human CGRP antibody or antibody fragment comprises:

(i) a variable light chain comprising a VL CDR1 of SEQ ID NO:55, a VL CDR2 of SEQ ID NO:56, a VL CDR3 of SEQ ID NO:57; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:58, a VH CDR2 of SEQ ID NO:59 and a VH CDR3 of SEQ ID NO:60;

(ii) a variable light chain comprising a VL CDR1 of SEQ ID NO:5, a VL CDR2 of SEQ ID NO:6, a VL CDR3 of SEQ ID NO:7; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:8, a VH CDR2 of SEQ ID NO:9 and a VH CDR3 of SEQ ID NO:10;

(iii) a variable light chain comprising a VL CDR1 of SEQ ID NO:15, a VL CDR2 of SEQ ID NO:16, a VL CDR3 of SEQ ID NO:17; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:18, a VH CDR2 of SEQ ID NO:19 and a VH CDR3 of SEQ ID NO:20;

(iv) a variable light chain comprising a VL CDR1 of SEQ ID NO:25, a VL CDR2 of SEQ ID NO:26, a VL CDR3 of SEQ ID NO:27; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:28, a VH CDR2 of SEQ ID NO:29 and a VH CDR3 of SEQ ID NO:30;

(v) a variable light chain comprising a VL CDR1 of SEQ ID NO:35, a VL CDR2 of SEQ ID NO:36, a VL CDR3 of SEQ ID NO:37; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:38, a VH CDR2 of SEQ ID NO:39 and a VH CDR3 of SEQ ID NO:40;

(vi) a variable light chain comprising a VL CDR1 of SEQ ID NO:45, a VL CDR2 of SEQ ID NO:46, a VL CDR3 of SEQ ID NO:47; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:48, a VH CDR2 of SEQ ID NO:49 and a VH CDR3 of SEQ ID NO:50;

(vii) a variable light chain comprising a VL CDR1 of SEQ ID NO:65, a VL CDR2 of SEQ ID NO:66, a VL CDR3 of SEQ ID NO:67; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:68, a VH CDR2 of SEQ ID NO:69 and a VH CDR3 of SEQ ID NO:70;

(viii) a variable light chain comprising a VL CDR1 of SEQ ID NO:75, a VL CDR2 of SEQ ID NO:76, a VL CDR3 of SEQ ID NO:77; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:78, a VH CDR2 of SEQ ID NO:79 and a VH CDR3 of SEQ ID NO:80;

(ix) a variable light chain comprising a VL CDR1 of SEQ ID NO:85, a VL CDR2 of SEQ ID NO:86, a VL CDR3 of SEQ ID NO:87; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:88, a VH CDR2 of SEQ ID NO:89 and a VH CDR3 of SEQ ID NO:90;

(x) a variable light chain comprising a VL CDR1 of SEQ ID NO:95, a VL CDR2 of SEQ ID NO:96, a VL CDR3 of SEQ ID NO:97; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:98, a VH CDR2 of SEQ ID NO:99 and a VH CDR3 of SEQ ID NO:100;

(xi) a variable light chain comprising a VL CDR1 of SEQ ID NO:105, a VL CDR2 of SEQ ID NO:106, a VL CDR3 of SEQ ID NO:107; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:108, a VH CDR2 of SEQ ID NO:109 and a VH CDR3 of SEQ ID NO:110;

(xii) a variable light chain comprising a VL CDR1 of SEQ ID NO:115, a VL CDR2 of SEQ ID NO:116, a VL CDR3 of SEQ ID NO:117; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:118, a VH CDR2 of SEQ ID NO:119 and a VH CDR3 of SEQ ID NO:120;

(xiii) a variable light chain comprising a VL CDR1 of SEQ ID NO:125, a VL CDR2 of SEQ ID NO:126, a VL CDR3 of SEQ ID NO:127; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:128, a VH CDR2 of SEQ ID NO:129 and a VH CDR3 of SEQ ID NO:130;

(xiv) a variable light chain comprising a VL CDR1 of SEQ ID NO:135, a VL CDR2 of SEQ ID NO:136, a VL CDR3 of SEQ ID NO:137; and a variable heavy chain comprising a VH CDR1 of SEQ ID NO:138, a VH CDR2 of SEQ ID NO:139 and a VH CDR3 of SEQ ID NO:140;

(xv) a variable light chain having the amino acid sequence set forth in SEQ ID NO:51 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:53;

(xvi) a variable light chain having the amino acid sequence set forth in SEQ ID NO:1 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:3;

(xvii) a variable light chain having the amino acid sequence set forth in SEQ ID NO:11 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:13;

(xviii) a variable light chain having the amino acid sequence set forth in SEQ ID NO:21 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:23;

(xix) a variable light chain having the amino acid sequence set forth in SEQ ID NO:31 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:33;

(xx) a variable light chain having the amino acid sequence set forth in SEQ ID NO:41 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:43;

(xxi) a variable light chain having the amino acid sequence set forth in SEQ ID NO:61 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:63;

(xxii) a variable light chain having the amino acid sequence set forth in SEQ ID NO:71 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:73;

(xxiii) a variable light chain having the amino acid sequence set forth in SEQ ID NO:81 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:83;

(xxiv) a variable light chain having the amino acid sequence set forth in SEQ ID NO:91 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:93;

(xxv) a variable light chain having the amino acid sequence set forth in SEQ ID NO:101 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:103;

(xxvi) a variable light chain having the amino acid sequence set forth in SEQ ID NO:111 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:113;

(xxvii) a variable light chain having the amino acid sequence set forth in SEQ ID NO:121 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:123;

(xxviii) a variable light chain having the amino acid sequence set forth in SEQ ID NO:131 and a variable heavy chain having the amino acid sequence set forth in SEQ ID NO:133;

(xxix) a light chain having the amino acid sequence set forth in SEQ ID NO:52 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:54;

(xxx) a light chain having the amino acid sequence set forth in SEQ ID NO:2 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:4;

(xxxi) a light chain having the amino acid sequence set forth in SEQ ID NO:12 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:14;

(xxxii) a light chain having the amino acid sequence set forth in SEQ ID NO:22 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:24;

(xxxiii) a light chain having the amino acid sequence set forth in SEQ ID NO:32 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:34;

(xxxiv) a light chain having the amino acid sequence set forth in SEQ ID NO:42 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:44;

(xxxv) a light chain having the amino acid sequence set forth in SEQ ID NO:62 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:64;

(xxxvi) a light chain having the amino acid sequence set forth in SEQ ID NO:72 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:74;

(xxxvii) a light chain having the amino acid sequence set forth in SEQ ID NO:82 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:84;

(xxxviii) a light chain having the amino acid sequence set forth in SEQ ID NO:92 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:94;

(xxxix) a light chain having the amino acid sequence set forth in SEQ ID NO:102 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:104;

(xl) a light chain having the amino acid sequence set forth in SEQ ID NO:112 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:114;

(xli) a light chain having the amino acid sequence set forth in SEQ ID NO:122 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:124; or

(xlii) a light chain having the amino acid sequence set forth in SEQ ID NO:132 and a heavy chain having the amino acid sequence set forth in SEQ ID NO:134.

5.) The isolated anti-human CGRP antibody or antibody fragment according to any one of claims 1 to 4, which:

(i) is aglycosylated;

(ii) is glycosylated, but only contains only mannose residues;

(iii) is not N-glycosylated;

(iv) contains an Fc region that has been modified to alter effector function, half-life, proteolysis, and/or glycosylation;

(v) is a humanized antibody, a chimeric antibody, a single chain antibody or a monovalent antibody;

(vi) is an antibody fragment selected from a Fab fragment, a Fab' fragment, a F(ab')2 fragment, or a monovalent antibody such as "metMab".

(vii) is directly or indirectly attached to a detectable label or therapeutic agent;

(viii) 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};

(ix) inhibits the association of CGRP with a CGRP-R and/or multimers thereof, one or more additional proteins in a CGRP-CGRP-R complex, and/or antagonizes the biological effects thereof;

(x) further comprises an effector moiety that is a detectable moiety or a functional moiety, wherein said detectable moiety is optionally a fluorescent dye, an enzyme, a substrate, a

bioluminescent material, a radioactive material, or a chemiluminescent material and said functional moiety optionally is streptavidin, avidin, biotin, a cytotoxin, a cytotoxic agent, or a radioactive material; and/or

(xi) comprises a human F_c that is derived from IgG1, IgG2, IgG3, or IgG4.

6.) The isolated anti-human CGRP antibody or antibody fragment according to any one of claims 1 to 5, which specifically binds to CGRP expressing human cells and/or binds to circulating soluble CGRP molecules in vivo and/or specifically binds to CGRP expressed on or by human cells in a patient with a disease associated with cells that bind CGRP, wherein the disease is selected from migraine (with or without aura), a condition with CGRP-associated pain, weight loss, cancer or tumors, overactive bladder, urinary incontinence, pruritis, psoriasis, ulcer, a cardiac condition, angiogenesis associated with cancer or tumor growth, angiogenesis associated with cancer or tumor survival, migraines, chronic migraines, frequent episodic migraines, menstrual migraines, hemiplagic migraines, cluster headaches, migrainous neuralgia, chronic headaches, tension headaches, general headaches, hot flushes, chronic paroxysomal hemicrania, secondary headaches due to an underlying structural problem in the head or neck, cranial neuralgia, sinus headaches (such as for example associated with sinusitis), allergy-induced headaches or migraines, pain, TMJ, temporomandibular jaw disorders, inflammatory pain, visceral 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, 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, osteoarthritis or rheumatoid arthritis pain, lower back pain, diabetic neuropathy, sciatica, 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, and pancreatitis; preferably wherein the disease is selected from pain, visceral pain, TMJ, temporomandibular jaw disorders, headache, overactive bladder, urinary incontinence, cluster headache and migraine; more preferably, wherein the disease is migraine selected from

migraine with or without aura, chronic migraine, frequent episodic migraines, or menstrual migraines.

7.) A nucleic acid sequence or nucleic acid sequences encoding the anti-human CGRP antibody or antibody fragment of any one of claims 1 to 6, wherein the nucleic acid sequence or sequences are optionally comprised of yeast or human preferred codons.

8.) A vector comprising the nucleic acid sequence or sequences of claim 7, wherein the vector is optionally a plasmid or recombinant viral vector.

9.) A cultured or recombinant cell that expresses an antibody or antibody fragment encoded by the nucleic acid sequence or sequences of claim 7 and/or the vector of claim 8, wherein the cell is optionally selected from a yeast, mammalian, bacterial, fungal, or insect cell, wherein preferably the cell is a diploidal yeast cell such as a Pichia yeast.

10.) An anti-human CGRP antibody or antibody fragment of any one of claims 1 to 6 for use in the treatment of a disease or condition treatable by the administration of a therapeutically effective amount of a CGRP antagonist and/or ameliorating or reducing symptoms of a disease or condition treatable by the administration of a CGRP antagonist, wherein the disease or condition is associated with CGRP expressing cells, preferably cells with increased CGRP expression, which is optionally selected from migraine (with or without aura), weight loss, cancer or tumors, angiogenesis associated with cancer or tumor growth, angiogenesis associated with cancer or tumor survival, migraine, chronic migraine, frequent episodic migraines, menstrual migraines, hemiplagic migraines, cluster headaches, migrainous neuralgia, chronic headaches, tension headaches, general headaches, hot flushes, chronic paroxysomal hemicrania, secondary headaches due to an underlying structural problem in the head or neck, cranial neuralgia, sinus headaches (such as for example associated with sinusitis), 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, hepatocellular carcinoma, breast cancer, liver cirrhosis, neurogenic pain, neuropathic pain, nociceptic pain, trigeminal neuralgia, postherpetic neuralgia, phantom limb pain,

fibromyalgia, 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, wherein the disease is preferably selected from overactive bladder; urinary incontinence; pain; chronic pain; neurogenic inflammation and inflammatory pain; neuropathic pain; eye pain; tooth pain; post-surgical pain, trauma related pain, diabetes; non-insulin dependent diabetes mellitus and other inflammatory autoimmune disorders, vascular disorders; inflammation; arthritis; bronchial hyperreactivity, asthma; shock; sepsis; opiate withdrawal syndrome; morphine tolerance; hot flashes in men and women; allergic dermatitis; psoriasis; encephalitis; brain trauma; epilepsy; neurodegenerative diseases; skin diseases, pruritis, neurogenic cutaneous redness, skin rosaceousness and erythema; inflammatory bowel disease, irritable bowel syndrome, cystitis; and dysmennorhea, wherein the disease is more preferably selected from pain, overactive bladder, urinary incontinence, headache or migraine.

11.) The antibody of claim 10, which is to be administered with another therapeutic agent selected from an analgesic, an anti-histamine, an anti-inflammatory agent, an antibiotic, a chemotherapeutic, an immunosuppressant, a cytokine, an anti-proliferative, an antiemetic or a cytotoxin,

wherein the analgesic is optionally an NSAID, an opioid analgesic, an antibody or antibody fragment, or a non-antibody biologic,

wherein the NSAID is preferably selected from a cyclooxygenase 1 and/or cyclooxygenase 2 inhibitor; propionic acid derivatives including ibuprofen, naproxen, naprosyn, diclofenac, and ketoprofen; acetic acid derivatives including tolmetin and slindac; fenamic acid derivatives including mefenamic acid and meclofenamic acid; biphenylcarboxylic acid derivatives including diflunisal and flufenisal; and oxicams including piroxim, sudoxicam, and isoxicam,

wherein the analgesic is preferably selected from a phenanthrene; a phenylheptylamine; a phenylpiperidine; a morphinan; and a benzomorphan compound,

wherein the opioid analgesic is preferably selected from codeine, dihydrocodeine, diacetylmorphine, hydrocodone, hydromorphone, levorphanol, oxymorphone, alfentanil, buprenorphine, butorphanol, fentanyl, sufentanyl, meperidine, methadone, nalbuphine, propoxyphene, pentazocine or pharmaceutically acceptable salts thereof, and morphine or a morphine derivative or pharmaceutically acceptable salts thereof, and

wherein the antibody or antibody fragment is perferably a NGF antibody or antibody fragment.

12.) A method of in vivo imaging that detects the presence of cells expressing CGRP comprising administering a diagnostically effective amount of at least one anti-human CGRP antibody or antibody fragment according to any one of claims 1 to 6, wherein said administration optionally further includes the administration of a radionuclide or fluorophore that facilitates detection of the antibody at CGRP expressing disease sites and wherein the results are optionally used to facilitate design of an appropriate therapeutic regimen.

13.) A method of making the antibody or antibody fragment of any one of claims 1 to 6 in a polyploid yeast culture that stably expresses and secretes into the culture medium at least 10-25 mg/liter of said antibody, comprising:

(i) introducing at least one expression vector containing one or more heterologous polynucleotides encoding said antibody operably linked to a promoter and a signal sequence into a haploid yeast cell;

(ii) producing by mating or spheroplast fusion a polyploidal yeast from said first and/or second haploid yeast cell;

(iii) selecting polyploidal yeast cells that stably express said antibody; and

(iv) producing stable polyploidal yeast cultures from said polyploidal yeast cells that stably express said antibody into the culture medium,

wherein said yeast is optionally a species of Pichia that is selected from *Pichia pastoris*, *Pichia methanolica* or *Hansenula polymorpha* (*Pichia angusta*), wherein the species of Pichia is preferably *Pichia pastoris*.

14.) The method of claim 13, wherein said heterologous polynucleotide comprises a sequence encoding the polypeptides contained in SEQ ID NO:51 and SEQ ID NO:53; SEQ ID NO:1 and SEQ ID NO:3; SEQ ID NO:11 and SEQ ID NO:13; SEQ ID NO:21 and SEQ ID NO:23; SEQ ID NO:31 and SEQ ID NO:33; SEQ ID NO:41 and SEQ ID NO:43; SEQ ID NO:61 and SEQ ID NO:63; SEQ ID NO:71 and SEQ ID NO:73; SEQ ID NO:81 and SEQ ID NO:83; SEQ ID NO:91 and SEQ ID NO:93; SEQ ID NO:101 and SEQ ID NO:103; SEQ ID NO:111 and SEQ ID NO:113; SEQ ID NO:121 and SEQ ID NO:123; or SEQ ID NO:131 and SEQ ID NO:133.

15.) A pharmaceutical or diagnostic composition containing at least one anti-human CGRP antibody or fragment according to any one of claims 1 to 6 and a pharmaceutically acceptable carrier, wherein said composition optionally further comprises at least one stabilizer and is optionally lyophilized.

CLAIMS

1.) An isolated anti-human CGRP antibody or antibody fragment comprising (i) a variable light (V_L) chain polypeptide comprising a V_L complementarity determining region 1 (CDR1) of SEQ ID NO:55, a V_L complementarity determining region 2 (CDR2) of SEQ ID NO:56, a V_L complementarity determining region 3 (CDR3) of SEQ ID NO:57; and a variable heavy (V_H) chain polypeptide comprising a V_H CDR1 of SEQ ID NO:58, a V_H CDR2 of SEQ ID NO:59 and a V_H CDR3 of SEQ ID NO:60.

2.) The isolated anti-human CGRP antibody or antibody fragment according to claim 1, wherein said anti-human CGRP antibody or antibody fragment comprises:

(i) a V_H chain polypeptide having the amino acid sequence set forth in SEQ ID NO: 53, or a variant thereof that exhibits at least 90%, at least 95%, at least 98% or at least 99% sequence identity therewith; and/or

(ii) a V_L chain polypeptide having the amino acid sequence set forth in SEQ ID NO: 51, or a variant thereof that exhibits at least 90%, at least 95%, at least 98% or at least 99% sequence identity therewith,

wherein one or more of said framework (FR) residues are optionally 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 chain polypeptides have been derived or by a conservative amino acid substitution, preferably at most 1 or 2 of the residues in the CDRs of said V_L chain polypeptide sequence and/or at most 1 or 2 of the residues in the CDRs of said V_H chain polypeptide sequence are modified.

3.) The isolated anti-human CGRP antibody or antibody fragment according to claim 1, wherein said anti-human CGRP antibody or antibody fragment comprises:

(i) a V_L chain polypeptide having the amino acid sequence of SEQ ID NO:51 and a V_H chain polypeptide having the amino acid sequence of SEQ ID NO:53;

(ii) a light chain having the amino acid sequence of SEQ ID NO:52 and a heavy chain having the amino acid sequence of SEQ ID NO:54.

4.) The isolated anti-human CGRP antibody or antibody fragment according to any one of claims 1 to 3, which:

(i) is aglycosylated;

(ii) is glycosylated, but only contains only mannose residues;

(iii) is not N-glycosylated;

(iv) contains an Fc region that has been modified to alter effector function, half-life, proteolysis, and/or glycosylation;

(v) is a humanized antibody, a chimeric antibody, a single chain antibody or a monovalent antibody;

(vi) is an antibody fragment selected from a Fab fragment, a Fab' fragment, a F(ab')2 fragment, or a monovalent antibody;

(vii) is directly or indirectly attached to a detectable label or therapeutic agent;

(viii) 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};

(ix) inhibits the association of CGRP with a CGRP-R and/or multimers thereof, one or more additional proteins in a CGRP-CGRP-R complex, and/or antagonizes the biological effects thereof;

(x) further comprises an effector moiety that is a detectable moiety or a functional moiety, wherein said detectable moiety is optionally a fluorescent dye, an enzyme, a substrate, a bioluminescent material, a radioactive material, or a chemiluminescent material and said functional moiety optionally is streptavidin, avidin, biotin, a cytotoxin, a cytotoxic agent, or a radioactive material; or

(xi) comprises a human F_c that is derived from IgG1, IgG2, IgG3, or IgG4.

5.) The isolated anti-human CGRP antibody or antibody fragment according to any one of claims 1 to 4, which specifically binds to CGRP expressing human cells and/or binds to circulating soluble CGRP molecules in vivo and/or specifically binds to CGRP expressed on or by human cells in a patient with a disease associated with cells that bind CGRP, wherein the disease is selected from migraine with aura, migraine without aura, a condition with CGRP-associated pain, weight loss, cancer or tumors, overactive bladder, urinary incontinence, pruritus, psoriasis, ulcer, a cardiac condition, angiogenesis associated with cancer or tumor growth, angiogenesis associated with cancer or tumor survival, migraines, chronic migraines, frequent episodic migraines, menstrual migraines, hemiplegic migraines, cluster headaches, migrainous neuralgia, chronic headaches, tension headaches, general headaches, hot flushes, chronic paroxysmal hemicrania, secondary headaches due to an underlying structural problem in the head, secondary headaches due to an underlying problem in the neck, cranial neuralgia, sinus headaches (such as for example associated with sinusitis), allergy-induced headaches, allergy-induced migraines, pain, TMJ, temporomandibular jaw disorders, inflammatory pain, visceral pain, post-operative incision pain, complex regional pain syndrome, cancer pain, primary bone cancer pain, metastatic bone cancer pain, fracture pain, osteoporotic fracture pain, pain resulting from burn, osteoporosis, gout joint pain, pain associated with sickle cell crises, hepatocellular carcinoma, breast cancer, liver cirrhosis, neurogenic pain, neuropathic pain, nociceptive pain, trigeminal neuralgia, post-herpetic neuralgia, phantom limb pain, fibromyalgia, menstrual pain, ovarialgia, reflex sympathetic dystrophy, osteoarthritis pain, rheumatoid arthritis pain, lower back pain, diabetic neuropathy, sciatica, 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, and pancreatitis; preferably wherein the disease is selected from pain, visceral pain, TMJ, temporomandibular jaw disorders, headache, overactive bladder, urinary incontinence, cluster headache and migraine; more preferably, wherein the disease is migraine selected from migraine with aura, migraine without aura, chronic migraine, frequent episodic migraines, or menstrual migraines.

6.) A nucleic acid sequence or nucleic acid sequences encoding the anti-human CGRP antibody or antibody fragment of any one of claims 1 to 5, wherein the nucleic acid sequence or sequences are optionally comprised of yeast or human preferred codons.

7.) A vector comprising the nucleic acid sequence or sequences of claim 6, wherein the vector is optionally a plasmid or recombinant viral vector.

8.) A cultured or recombinant cell that expresses an antibody or antibody fragment encoded by the nucleic acid sequence or sequences of claim 6 and/or the vector of claim 7, wherein the cell is optionally selected from a yeast, mammalian, bacterial, fungal, or insect cell, wherein preferably the cell is a diploidal yeast cell such as a Pichia yeast.

9.) An anti-human CGRP antibody or antibody fragment of any one of claims 1 to 5~~6~~ for use in the treatment of a disease or condition treatable by the administration of a therapeutically effective amount of a CGRP antagonist and/or ameliorating or reducing symptoms of a disease or condition treatable by the administration of a CGRP antagonist, wherein the disease or condition is associated with CGRP expressing cells, preferably cells with increased CGRP expression, which is optionally selected from migraine with aura, migraine without aura, weight loss, cancer or tumors, angiogenesis associated with cancer or tumor growth, angiogenesis associated with cancer or tumor survival, migraine, chronic migraine, frequent episodic migraines, menstrual migraines, hemiplegic migraines, cluster headaches, migrainous neuralgia, chronic headaches, tension headaches, general headaches, hot flushes, chronic paroxysmal hemicrania, secondary headaches due to an underlying structural problem in the head, secondary headaches due to an underlying problem in the neck, cranial neuralgia, sinus headaches (such as for example associated with sinusitis), allergy-induced headaches, allergy-induced migraines, pain, inflammatory pain, post-operative incision pain, complex regional pain syndrome, cancer pain, primary bone cancer pain, metastatic bone cancer pain, fracture pain, osteoporotic fracture pain, pain resulting from burn, osteoporosis, gout joint pain, pain associated with sickle cell crises, hepatocellular carcinoma, breast cancer, liver cirrhosis, neurogenic pain, neuropathic pain, nociceptive pain, trigeminal neuralgia, postherpetic neuralgia, phantom limb pain, fibromyalgia, ovarialgia, reflex sympathetic dystrophy, neurogenic pain, osteoarthritis pain, rheumatoid arthritis pain, lower back pain, diabetic neuropathy, sciatica, 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, wherein the disease is preferably selected from overactive bladder; urinary incontinence; pain; chronic pain; neurogenic inflammation; ~~and~~ inflammatory pain; neuropathic pain; eye pain; tooth pain; post-surgical pain, trauma related pain, diabetes; non-insulin dependent diabetes mellitus and other inflammatory autoimmune disorders, vascular disorders; inflammation; arthritis; bronchial hyperreactivity, asthma; shock; sepsis; opiate withdrawal syndrome; morphine tolerance; hot flashes in men and women; allergic dermatitis; psoriasis; encephalitis; brain trauma; epilepsy; neurodegenerative diseases; skin diseases, pruritus, neurogenic cutaneous redness, skin rosaceousness and erythema; inflammatory bowel disease, irritable bowel syndrome, cystitis; and dysmenorrhea, wherein the disease is more preferably selected from pain, overactive bladder, urinary incontinence, headache or migraine.

10.) The antibody of claim 9, which is to be administered with another therapeutic agent selected from an analgesic, an anti-histamine, an anti-inflammatory agent, an antibiotic, a chemotherapeutic, an immunosuppressant, a cytokine, an anti-proliferative, an antiemetic or a cytotoxin,

wherein the analgesic is optionally an NSAID, an opioid analgesic, an antibody or antibody fragment, or a non-antibody biologic,

wherein the NSAID is preferably selected from a cyclooxygenase 1 and/or cyclooxygenase 2 inhibitor; propionic acid derivatives including ibuprofen, naproxen, naprosyn, diclofenac, and ketoprofen; acetic acid derivatives including tolmetin and sulindac; fenamic acid derivatives including mefenamic acid and meclofenamic acid; biphenylcarboxylic acid derivatives including diflunisal and flufenisal; and oxicams including piroxicam, sudoxicam, and isoxicam,

wherein the analgesic is preferably selected from a phenanthrene; a phenylheptylamine; a phenylpiperidine; a morphinan; and a benzomorphan compound,

wherein the opioid analgesic is preferably selected from codeine, dihydrocodeine, diacetylmorphine, hydrocodone, hydromorphone, levorphanol, oxymorphone, alfentanil,

buprenorphine, butorphanol, fentanyl, sufentanil, meperidine, methadone, nalbuphine, propoxyphene, pentazocine or pharmaceutically acceptable salts thereof, and morphine or a morphine derivative or pharmaceutically acceptable salts thereof, and

wherein the antibody or antibody fragment is preferably a NGF antibody or antibody fragment.

11.) A method of in vivo imaging that detects the presence of cells expressing CGRP comprising administering a diagnostically effective amount of at least one anti-human CGRP antibody or antibody fragment according to any one of claims 1 to 5, wherein said administration optionally further includes the administration of a radionuclide or fluorophore that facilitates detection of the antibody at CGRP expressing disease sites and wherein the results are optionally used to facilitate design of an appropriate therapeutic regimen.

12.) A method of making the antibody or antibody fragment of any one of claims 1 to 5 in a polyploid yeast culture that stably expresses and secretes into the culture medium at least 10-25 mg/liter of said antibody, comprising:

(i) introducing at least one expression vector containing one or more heterologous polynucleotides encoding said antibody operably linked to a promoter and a signal sequence into a haploid yeast cell;

(ii) producing by mating or spheroplast fusion a polyploidal yeast from said first and/or second haploid yeast cell;

(iii) selecting polyploidal yeast cells that stably express said antibody; and

(iv) producing stable polyploidal yeast cultures from said polyploidal yeast cells that stably express said antibody into the culture medium,

wherein said yeast is optionally a species of Pichia that is selected from *Pichia pastoris*, *Pichia methanolica* or *Hansenula polymorpha* (*Pichia angusta*), wherein the species of Pichia is preferably *Pichia pastoris*.

13.) The method of claim 12, wherein said heterologous polynucleotide comprises a sequence encoding the polypeptides contained in SEQ ID NO:51 and SEQ ID NO:53.

14.) A pharmaceutical or diagnostic composition containing at least one anti-human CGRP antibody or fragment according to any one of claims 1 to 5 and a pharmaceutically acceptable carrier, wherein said composition optionally further comprises at least one stabilizer and is optionally lyophilized.